

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

AUGUST 17, 2006



**PERMIT TO INSTALL
NO. 389-96B**

**ISSUED TO
FINISHING TOUCH**

**LOCATED AT
191 SIMPSON DRIVE
LITCHFIELD, MICHIGAN 49252**

**IN THE COUNTY OF
HILLSDALE**



**STATE REGISTRATION NUMBER
N2384**

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: 8/10/2006	
DATE PERMIT TO INSTALL APPROVED: 8/17/2006	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
Emission Unit Identification	5
Flexible Group Identification.....	5
Emission Unit Special Conditions	6
Emission Unit Special Conditions	8
Emission Unit Special Conditions	10
Emission Unit Special Conditions	12
Emission Unit Special Conditions	14
Emission Unit Special Conditions	16
Flexible Group Special Conditions	17
Flexible Group Special Conditions	19
Appendices.....	21
Appendices.....	22
Appendices.....	23

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
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	PM-10	Particulate Matter less than 10 microns diameter
NSPS	New Source Performance Standards	pph	Pounds per hour
NSR	New Source Review	ppm	Parts per million
PS	Performance Specification	ppmv	Parts per million by volume
PSD	Prevention of Significant Deterioration	ppmw	Parts per million by weight
PTE	Permanent Total Enclosure	psia	Pounds per square inch absolute
PTI	Permit to Install	psig	Pounds per square inch gauge
RACT	Reasonably Available Control Technology	scf	Standard cubic feet
ROP	Renewable Operating Permit	sec	Seconds
SC	Special Condition Number	SO ₂	Sulfur Dioxide
SCR	Selective Catalytic Reduction	THC	Total Hydrocarbons
SRN	State Registration Number	tpy	Tons per year
TAC	Toxic Air Contaminant	µg	Microgram
TEQ	Toxicity Equivalence Quotient	VOC	Volatile Organic Compound
VE	Visible Emissions	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. **[R336.1201(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. **[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 AQD District Supervisor shall be notified, in writing, of a change in ownership or operational control of the stationary source or emission unit(s) authorized by this Permit to Install pursuant to R336.1219. The notification shall include all of the information required by R336.1219(1)(a) and (b). In addition, a new owner or operator must submit a written statement pursuant to R336.1219(1)(c), agreeing to and accepting the terms and conditions of this Permit to Install, and shall notify the AQD District Supervisor of any change in the contact person for this Permit to Install. **[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 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). **[R336.1912]**
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 nor does it affect any liability for past violations under the Natural Resources and Environmental Protection Act, 1994 PA 451.
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 R336.1301, 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 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. 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]**

SPECIAL CONDITIONS

Emission Unit Identification

Emission Unit ID	Emission Unit Description	Stack Identification
EU-CHAINONEDGE	Two paint spray booths, a triple-pass drying oven, and a cool-off cabinet.	SV00011 SV00012 SV00014
EU-DIPLINE	Small dip tank placed in the spray line booth and a shared double-pass bake oven.	SV0005 SV0009
EU-SPRAYLINE	Two paint spray booths and a shared double-pass bake oven.	SV0005 SV0009
EU-SINGLESPINDLE	One spray booth with spindle.	SV00016
EU-60SPINDLE	One spray booth with spindle.	SV00015
EU-CLEANUP	Cleanup solvent usage.	NA
EU-3-SWASHER	Three stage parts washer and dry off oven.	SV0001 SV0002 SV0010
EU-5-SWASHER	Five stage parts washer and dry off oven.	SV0003 SV0004 SV0007 SV0008
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
FG-WASHERS	EU-3-SWASHER, EU-5-SWASHER	SV0001 SV0002 SV0003 SV0004 SV0007 SV0008 SV0010
FG-FACILITY	All process equipment at the stationary source including equipment covered by other permits, grandfathered equipment and exempt equipment.	NA

The following conditions apply to: EU-CHAINONEDGE

Emission Limits

	Pollutant	Equipment	Limit	Time Period	Testing/ Monitoring Method	Applicable Requirements
1.1a	VOCs	EU-CHAINONEDGE	10.0 tpy	12-month rolling time period as determined at the end of each calendar month.	SC 1.9	R336.1702(d)
1.1b	VOCs	EU-CHAINONEDGE	2000 lb/month	Calendar month	SC 1.9	R336.1702(d)

Process / Operational Limits

- 1.2 The permittee shall capture all waste coatings and solvents and shall store them in closed containers. The permittee shall dispose of all waste coatings and solvents in an acceptable manner in compliance with all applicable state rules and federal regulations. **[R336.1224, R336.1702(a)]**
- 1.3 The permittee shall dispose of spent filters in a manner which minimizes the introduction of air contaminants to the outer air. **[R336.1224, R336.1370]**

Equipment

- 1.4 The permittee shall not operate the spray booth portions of EU-CHAINONEDGE unless all respective exhaust filters are installed, maintained and operated in a satisfactory manner. **[R336.1224, R336.1301, R336.1331, R336.1901, R336.1910]**
- 1.5 The permittee shall equip and maintain the spray booth portions of EU-CHAINONEDGE with HVLP applicators or comparable technology with equivalent transfer efficiency. For HVLP applicators, the permittee shall keep test caps available for pressure testing. **[R336.1702(a)]**

Testing

- 1.6 The permittee shall determine the VOC content, water content and density of any coating and solvent, as applied and as received, using federal Reference Test Method 24. Upon prior written approval by the AQD District Supervisor, the permittee may determine the VOC content from manufacturer's formulation data. If the Method 24 and the formulation values should differ, the permittee shall use the Method 24 results to determine compliance. **[R336.1225, R336.1702(a), R336.1901]**

Recordkeeping /Reporting /Notification

- 1.7 The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor and make them available by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition. **[R336.1225, R336.1702, R336.1901]**
- 1.8 The permittee shall maintain a current listing from the manufacturer of the chemical composition of each coating and solvent, 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 for a period of at least five years and make them available to the Department upon request. **[R336.1225, R336.1702, R336.1901]**

- 1.9 The permittee shall keep the following information on a monthly basis for EU-CHAINONEDGE:
- a) Daily, gallons (with water) of each coating and solvent used. (Coating and solvent usage shall be determined using the procedures in Appendix C, or an alternate method approved by the AQD District Supervisor).
 - b) VOC content (with water) of each coating and solvent as applied.
 - c) VOC mass emission calculations determining the monthly emission rate in pounds and 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 permittee shall keep the records in the format specified in Appendix A, or an alternate format acceptable to the AQD District Supervisor. The permittee shall keep all records on file for a period of at least five years and make them available to the Department upon request. [R336.1225, R336.1702, R336.1901]

Stack / Vent Restrictions

	Stack & Vent ID	Maximum Diameter (inches)	Minimum Height Above Ground Level (feet)	Applicable Requirement
1.10a	SV00011-Chain on Edge B#2	24	42	R336.1225, R336.1901, 40 CFR 52.21(c) & (d)
1.10b	SV00012-Chain on Edge B#1	24	37.7	R336.1225, R336.1901, 40 CFR 52.21(c) & (d)
1.10c	SV00014-Triple pass oven	16	33.5	R336.1225, R336.1901, 40 CFR 52.21(c) & (d)
The exhaust gases shall be discharged unobstructed vertically upwards to the ambient air.				

The following conditions apply to: EU-DIPLINE

Emission Limits

	Pollutant	Equipment	Limit	Time Period	Testing/ Monitoring Method	Applicable Requirements
2.1a	VOCs	EU-DIPLINE	1.0 tpy	12-month rolling time period as determined at the end of each calendar month.	SC 2.6	R336.1702(a)

Process / Operational Limits

2.2 The permittee shall capture all waste coatings and solvents and shall store them in closed containers. The permittee shall dispose of all waste coatings and solvents in an acceptable manner in compliance with all applicable state rules and federal regulations. [R336.1224, R336.1702(a)]

Testing

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

Recordkeeping /Reporting /Notification

2.4 The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor and make them available by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition. [R336.1225, R336.1702, R336.1901]

2.5 The permittee shall maintain a current listing from the manufacturer of the chemical composition of each coating and solvent, 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 for a period of at least five years and make them available to the Department upon request. [R336.1225, R336.1702, R336.1901]

2.6 The permittee shall keep the following information on a monthly basis for EU-DIPLINE:

- a) Daily, gallons (with water) of each coating and solvent used. (Coating and solvent usage shall be determined using the procedures in Appendix C, or an alternate method approved by the AQD District Supervisor).
- b) VOC content (with water) of each coating and solvent as applied.
- c) VOC mass emission calculations determining the monthly emission rate in pounds and 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 permittee shall keep the records in the format specified in Appendix A, or an alternate format acceptable to the AQD District Supervisor. The permittee shall keep all records on file for a period of at least five years and make them available to the Department upon request. [R336.1225, R336.1702, R336.1901]

Stack / Vent Restrictions

	Stack & Vent ID	Maximum Diameter (inches)	Minimum Height Above Ground Level (feet)	Applicable Requirement
2.7a	SV0005-Dipline dip tank	24	36.5	R336.1225, R336.1901, 40 CFR 52.21(c) & (d)
2.7b	SV0009-Double pass bake oven	24	33.3	R336.1225, R336.1901, 40 CFR 52.21(c) & (d)
The exhaust gases shall be discharged unobstructed vertically upwards to the ambient air.				

The following conditions apply to: EU-SPRAYLINE

Emission Limits

	Pollutant	Equipment	Limit	Time Period	Testing/ Monitoring Method	Applicable Requirements
3.1a	VOCs	EU-SPRAYLINE	7.0 tpy	12-month rolling time period as determined at the end of each calendar month.	SC 3.8	R336.1702(a)

Process / Operational Limits

- 3.2 The permittee shall capture all waste coatings and solvents and shall store them in closed containers. The permittee shall dispose of all waste coatings and solvents in an acceptable manner in compliance with all applicable state rules and federal regulations. [R336.1224, R336.1702(a)]
- 3.3 The permittee shall dispose of spent filters in a manner which minimizes the introduction of air contaminants to the outer air. [R336.1224, R336.1370]

Equipment

- 3.4 The permittee shall not operate the spray booth portions of EU-SPRAYLINE unless all respective exhaust filters are installed, maintained and operated in a satisfactory manner. [R336.1224, R336.1301, R336.1331, R336.1901, R336.1910]

Testing

- 3.5 The permittee shall determine the VOC content, water content and density of any coating and solvent, as applied and as received, using federal Reference Test Method 24. Upon prior written approval by the AQD District Supervisor, the permittee may determine the VOC content from manufacturer's formulation data. If the Method 24 and the formulation values should differ, the permittee shall use the Method 24 results to determine compliance. [R336.1225, R336.1702(a), R336.1901]

Recordkeeping /Reporting /Notification

- 3.6 The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor and make them available by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition. [R336.1225, R336.1702, R336.1901]
- 3.7 The permittee shall maintain a current listing from the manufacturer of the chemical composition of each coating and solvent, 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 for a period of at least five years and make them available to the Department upon request. [R336.1225, R336.1702, R336.1901]
- 3.8 The permittee shall keep the following information on a monthly basis for EU-SPRAYLINE:
- a) Daily gallons (with water) of each coating and solvent used. (Coating and solvent usage shall be determined using the procedures in Appendix C, or an alternate method approved by the AQD District Supervisor).
 - b) VOC content (with water) of each coating and solvent as applied.

- c) VOC mass emission calculations determining the monthly emission rate in pounds and 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 permittee shall keep the records in the format specified in Appendix A, or an alternate format acceptable to the AQD District Supervisor. The permittee shall keep all records on file for a period of at least five years and make them available to the Department upon request. **[R336.1225, R336.1702, R336.1901]**

Stack / Vent Restrictions

	Stack & Vent ID	Maximum Diameter (inches)	Minimum Height Above Ground Level (feet)	Applicable Requirement
3.9a	SV0005-Spray wet booth W	24	36.5	R336.1225, R336.1901, 40 CFR 52.21(c) & (d)
3.9b	SV0006-Spray wet booth E	24	36	R336.1225, R336.1901, 40 CFR 52.21(c) & (d)
3.9c	SV0009-Double pass bake oven	24	33.3	R336.1225, R336.1901, 40 CFR 52.21(c) & (d)
The exhaust gases shall be discharged unobstructed vertically upwards to the ambient air.				

The following conditions apply to: EU-SINGLESPINDLE

Emission Limits

	Pollutant	Equipment	Limit	Time Period	Testing/ Monitoring Method	Applicable Requirements
4.1a	VOCs	EU-SINGLESPINDLE	0.5 tpy	12-month rolling time period as determined at the end of each calendar month.	SC 4.8	R336.1702(a)

Process / Operational Limits

- 4.2 The permittee shall capture all waste coatings and solvents and shall store them in closed containers. The permittee shall dispose of all waste coatings and solvents in an acceptable manner in compliance with all applicable state rules and federal regulations. [R336.1224, R336.1702(a)]
- 4.3 The permittee shall dispose of spent filters in a manner which minimizes the introduction of air contaminants to the outer air. [R336.1224, R336.1370]

Equipment

- 4.4 The permittee shall not operate the spray booth portions of EU-SINGLESPINDLE unless all respective exhaust filters are installed, maintained and operated in a satisfactory manner. [R336.1224, R336.1301, R336.1331, R336.1901, R336.1910]

Testing

- 4.5 The permittee shall determine the VOC content, water content and density of any coating and solvent, as applied and as received, using federal Reference Test Method 24. Upon prior written approval by the AQD District Supervisor, the permittee may determine the VOC content from manufacturer's formulation data. If the Method 24 and the formulation values should differ, the permittee shall use the Method 24 results to determine compliance. [R336.1225, R336.1702(a), R336.1901]

Recordkeeping /Reporting /Notification

- 4.6 The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor and make them available by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition. [R336.1225, R336.1702, R336.1901]
- 4.7 The permittee shall maintain a current listing from the manufacturer of the chemical composition of each coating and solvent, 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 for a period of at least five years and make them available to the Department upon request. [R336.1225, R336.1702, R336.1901]
- 4.8 The permittee shall keep the following information on a monthly basis for EU-SINGLESPINDLE:
- a) Daily gallons (with water) of each coating and solvent used. (Coating and solvent usage shall be determined using the procedures in Appendix C, or an alternate method approved by the AQD District Supervisor).
 - b) VOC content (with water) of each coating and solvent as applied.

- c) VOC mass emission calculations determining the monthly emission rate in pounds and 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 permittee shall keep the records in the format specified in Appendix A, or an alternate format acceptable to the AQD District Supervisor. The permittee shall keep all records on file for a period of at least five years and make them available to the Department upon request. **[R336.1225, R336.1702, R336.1901]**

Stack / Vent Restrictions

Stack & Vent ID	Maximum Diameter (inches)	Minimum Height Above Ground Level (feet)	Applicable Requirement
4.9 SV0016-Single spindle booth	18	38.6	R336.1225, R336.1901, 40 CFR 52.21(c) & (d)
The exhaust gases shall be discharged unobstructed vertically upwards to the ambient air.			

The following conditions apply to: EU-60SPINDLE

Emission Limits

	Pollutant	Equipment	Limit	Time Period	Testing/ Monitoring Method	Applicable Requirements
5.1a	VOCs	EU-60SPINDLE	1.5 tpy	12-month rolling time period as determined at the end of each calendar month.	SC 5.8	R336.1702(a)

Process / Operational Limits

- 5.2 The permittee shall capture all waste coatings and solvents and shall store them in closed containers. The permittee shall dispose of all waste coatings and solvents in an acceptable manner in compliance with all applicable state rules and federal regulations. [R336.1224, R336.1702(a)]
- 5.3 The permittee shall dispose of spent filters in a manner which minimizes the introduction of air contaminants to the outer air. [R336.1224, R336.1370]

Equipment

- 5.4 The permittee shall not operate the spray booth portions of EU-60SPINDLE unless all respective exhaust filters are installed, maintained and operated in a satisfactory manner. [R336.1224, R336.1301, R336.1331, R336.1901, R336.1910]

Testing

- 5.5 The permittee shall determine the VOC content, water content and density of any coating and solvent, as applied and as received, using federal Reference Test Method 24. Upon prior written approval by the AQD District Supervisor, the permittee may determine the VOC content from manufacturer's formulation data. If the Method 24 and the formulation values should differ, the permittee shall use the Method 24 results to determine compliance. [R336.1225, R336.1702(a), R336.1901]

Recordkeeping /Reporting /Notification

- 5.6 The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor and make them available by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition. [R336.1225, R336.1702, R336.1901]
- 5.7 The permittee shall maintain a current listing from the manufacturer of the chemical composition of each coating and solvent, 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 for a period of at least five years and make them available to the Department upon request. [R336.1225, R336.1702, R336.1901]
- 5.8 The permittee shall keep the following information on a monthly basis for EU-60SPINDLE:
- a) Daily gallons (with water) of each coating and solvent used. (Coating and solvent usage shall be determined using the procedures in Appendix C, or an alternate method approved by the AQD District Supervisor).
 - b) VOC content (with water) of each coating and solvent as applied.

- c) VOC mass emission calculations determining the monthly emission rate in pounds and 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 permittee shall keep the records in the format specified in Appendix A, or an alternate format acceptable to the AQD District Supervisor. The permittee shall keep all records on file for a period of at least five years and make them available to the Department upon request. **[R336.1225, R336.1702, R336.1901]**

Stack / Vent Restrictions

Stack & Vent ID	Maximum Diameter (inches)	Minimum Height Above Ground Level (feet)	Applicable Requirement
5.9 SV0015-60 Spindle Booth	24	39	R336.1225, R336.1901, 40 CFR 52.21(c) & (d)
The exhaust gases shall be discharged unobstructed vertically upwards to the ambient air.			

The following conditions apply to: EU-CLEANUP

Emission Limits

	Pollutant	Equipment	Limit	Time Period	Testing/ Monitoring Method	Applicable Requirements
6.1a	VOCs	EU-CLEANUP	2.0 tpy	12-month rolling time period as determined at the end of each calendar month	SC 6.6	R336.1702(a)

Process / Operational Limits

6.2 The permittee shall capture all waste solvents and shall store them in closed containers. The permittee shall dispose of all waste solvents in an acceptable manner in compliance with all applicable state rules and federal regulations. [R336.1224, R336.1702(a)]

Testing

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

Recordkeeping /Reporting /Notification

6.4 The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor and make them available by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition. [R336.1225, R336.1702, R336.1901]

6.5 The permittee shall maintain a current listing from the manufacturer of the chemical composition of each coating and solvent, 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 for a period of at least five years and make them available to the Department upon request. [R336.1225, R336.1702, R336.1901]

- 6.6 The permittee shall keep the following information on a monthly basis for EU-CLEANUP:
- a) Daily gallons of each solvent used and reclaimed. (Solvent usage shall be determined using the procedures in Appendix C, or an alternate method approved by the AQD District Supervisor.)
 - 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 permittee shall keep the records in the format specified in Appendix A, or an alternate format acceptable to the AQD District Supervisor. The permittee shall keep all records on file for a period of at least five years and make them available to the Department upon request. [R336.1225, R336.1702, R336.1901]

The following conditions apply to: FG-WASHERS

Emission Limits

	Pollutant	Equipment	Limit	Time Period	Testing/ Monitoring Method	Applicable Requirements
7.1a	VOCs	FG-WASHERS	0.3 tpy	12-month rolling time period as determined at the end of each calendar month.	SC 7.6	R336.1702(a)

Process / Operational Limits

7.2 The permittee shall capture all waste materials and shall store them in closed containers. The permittee shall dispose of all waste materials in an acceptable manner in compliance with all applicable state rules and federal regulations. [R336.1224, R336.1702(a)]

Testing

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

Recordkeeping /Reporting /Notification

7.4 The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor and make them available by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition. [R336.1225, R336.1702, R336.1901]

7.5 The permittee shall maintain a current listing from the manufacturer of the chemical composition of each coating and solvent, 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 for a period of at least five years and make them available to the Department upon request. [R336.1225, R336.1702, R336.1901]

7.6 The permittee shall keep the following information on a monthly basis for FG-WASHERS:

- a) Daily gallons (with water) or pounds (if a solid form) of each VOC-containing material used. (Liquid usage shall be determined using the procedures in Appendix C, or an alternate method approved by the AQD District Supervisor).
- b) VOC content, in pounds per gallon or pounds per pound, of each material used.
- c) VOC mass emission calculations determining the monthly emission rate in pounds and 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 permittee shall keep the records in the format specified in Appendix A, or an alternate format acceptable to the AQD District Supervisor. The permittee shall keep all records on file for a period of at least five years and make them available to the Department upon request. [R336.1225, R336.1702, R336.1901]

Stack / Vent Restrictions

	Stack & Vent ID	Maximum Diameter (inches)	Minimum Height Above Ground Level (feet)	Applicable Requirement
7.7a	SV0001-3-stage washer	14	39.4	R336.1225, R336.1901, 40 CFR 52.21(c) & (d)
7.7b	SV0002-3-stage washer	12	39.4	R336.1225, R336.1901, 40 CFR 52.21(c) & (d)
7.7c	SV0003-5-stage dry off oven	16	32.5	R336.1225, R336.1901, 40 CFR 52.21(c) & (d)
7.7d	SV0004-5-stage dry off oven	16	31.7	R336.1225, R336.1901, 40 CFR 52.21(c) & (d)
7.7e	SV0007-5-stage washer	24	39.7	R336.1225, R336.1901, 40 CFR 52.21(c) & (d)
7.7f	SV0008-5-stage washer	24	39	R336.1225, R336.1901, 40 CFR 52.21(c) & (d)
7.7g	SV0010-3-stage dry off oven	16	27	R336.1225, R336.1901, 40 CFR 52.21(c) & (d)
The exhaust gases shall be discharged unobstructed vertically upwards to the ambient air.				

The following conditions apply to: FGFACILITY

Emission Limits

	Pollutant	Equipment	Limit	Time Period	Testing/ Monitoring Method	Applicable Requirements
8.1a	Each Individual HAP	FGFACILITY	Less than 9.0 tpy	12-month rolling time period as determined at the end of each calendar month.	SC 8.5	R336.1205(3)
8.1b	Aggregate HAPs	FGFACILITY	Less than 22.5 tpy	12-month rolling time period as determined at the end of each calendar month.	SC 8.5	R336.1205(3)
8.1c	VOCs	FGFACILITY	Less than 90.0 tpy	12-month rolling time period as determined at the end of each calendar month.	SC 8.6	R336.1205(3)

Testing

- 8.2 The permittee shall determine the HAP content of any material, as received and as applied, using manufacturer’s formulation data. Upon request of the AQD District Supervisor, the permittee shall verify the manufacturer’s HAP formulation data using EPA Test Method 311. **[R336.1205(3)]**
- 8.3 The permittee shall determine the VOC content, water content, and density of any material, as applied and as received, using federal Reference Test Method 24. Upon prior written approval by the AQD District Supervisor, the permittee may determine the VOC content from manufacturer’s formulation data. If the Method 24 and the formulation values should differ, the permittee shall use the Method 24 results to determine compliance. **[R336.1205(3)]**

Recordkeeping / Reporting / Notification

- 8.4 The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor and make them available by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition. **[R336.1205(3)]**
- 8.5 The permittee shall keep the following information on a monthly basis for FGFACILITY:
- a) Gallons or pounds of each HAP containing material used.
 - b) Where applicable, gallons or pounds of each HAP containing material reclaimed.
 - c) HAP content, in pounds per gallon or pounds per pound, of each HAP containing 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 permittee shall keep the records in the format specified in Appendix B, or in an alternate format acceptable to the AQD District Supervisor. The permittee shall keep all records on file for a period of at least five years and make them available to the Department upon request. **[R336.1205(3)]**

- 8.6 The permittee shall keep the following information on a monthly basis for FGFACILITY:

- a) Gallons or pounds of each VOC containing material used.
- b) Where applicable, gallons or pounds of each VOC containing material reclaimed.
- c) VOC content, in pounds per gallon or pounds per pound, of each VOC containing material used.
- d) VOC emission calculations determining the monthly emission rate in tons per calendar month.
- e) VOC 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 the format specified in Appendix A, or in an alternate format acceptable to the AQD District Supervisor. The permittee shall keep all records on file for a period of at least five years and make them available to the Department upon request. **[R336.1205(3)]**

APPENDIX A
VOC Emission Calculations

Company:
Permit Number:

Emission Unit:
Month/Year:

Coating or Component	A Actual Gallons or Pounds Used	B Lbs. of VOC per Gallon or Pound	C = A x B Lbs. of VOC
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Total Pounds Emitted, this month = D = Sum of all C's **D =** _____

Total Tons VOCs Emitted, this month = E = D/2000 **E =** _____

Total Tons VOCs Emitted, previous 11 months = F **F =** _____

Total Tons VOCs Emitted over 12-month rolling period, G = E + F **G =** _____

APPENDIX C
Process Procedure:
Paint Usage Tracking & Measurement Procedure

Scope

This procedure details the instructions for tracking daily paint usage and the correct measurement.

Purpose

Paint usage is tracked for the Michigan Department of Environmental Quality. It is important that the numbers be tracked each day for each line. This means that each paint line will use its' own drum of paint. The only exception will be the Single Spindle booth. The Single Spindle booth will use paint taken from the C.O.E. line paint drum, the removal will be recorded on the paperwork for both the C.O.E. line and the Single Spindle booth.

Procedure

1. Paint Techs are responsible for taking the measurements. Measurements must be taken at the beginning and end of each shift.
2. Use the measuring stick specific to each line. Measuring sticks should not be shared across lines.
3. Each line equals one inch. Take measurements to the nearest inch at the beginning and end of each 8-hour shift.
4. Count the number of inches, to the nearest inch, of material that is in the drum using the marks on the stick.
5. Paint Techs will record the readings for the number of inches at the beginning of the shift and at the end of the shift.
6. The Efficiency Reports are placed in the box on the wall by the bulletin board at the front of the shop at the end of the shift.
7. These usages are then recorded on the material usage Excel spreadsheet. The Office Manager will do the calculations using a desktop electronic calculator, which is located on the Office Manager's desk. The Office Manager will then record the paint usage.
8. For a 55-gallon drum, multiply by 1.72 to get paint usage for an 8-hour shift.
9. For a 15-gallon drum, multiply by 0.667 to get paint usage for an 8-hour shift.
10. For a 5-gallon pail, multiply by 0.4000 to get paint usage for an 8-hour shift.
11. For a 1-gallon pail, multiply by 0.222 to get paint usage for an 8-hour shift.
12. The Office Manager will be responsible for transferring calculated gallon amounts to the AQD record keeping forms, entering/tracking VOC/HAP content of materials on the AQD forms. The environmental consultant will be responsible for comparisons for specified periods. The Office Manager will keep the completed Efficiency Reports on file.

**Process Procedure:
Methyl ethyl ketone (MEK) Usage Tracking & Measurement Procedure**

Scope

This procedure details the instructions for tracking monthly MEK usage and the correct measurement.

Purpose

MEK usage is tracked for the Michigan Department of Environmental Quality. It is important that the numbers be tracked monthly. Since only the amount of MEK that is actually consumed needs to be reported, both virgin stock and waste stick must be measured.

Procedure

1. Measurements must be taken at the end of each month. The Process Engineer is responsible for taking the measurements.
2. Use the MEK measuring stick. This measuring stick must not be used for any other purpose.
3. Each line equals one inch. Take measurements to the nearest inch.
4. Count the number of inches of material that is in the drum using the marks on the stick.
5. Multiply the number of inches by 1.71 to determine the number of gallons.
6. The Process Engineer will also record the number of inches used during the month.
7. The chemical inventory will be turned in to the Office Manager. The Office Manager will do the calculations for gallons of MEK use for the month.
8. These usages are then recorded on the material use Excel spreadsheet by the Office Manager.
9. The Office Manager will be responsible for transferring calculated gallon amounts onto the AQD record keeping forms, entering/tracking VOC/HAP content of each material used on the AQD forms. The environmental consultant will be responsible for comparisons for specified periods. The Office Manager will keep the chemical inventories on file.