STATE OF MICHIGAN JENNIFER M. GRANHOLM, Governor



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

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GENERAL PERMIT TO INSTALL FOR A COATING LINE EMITTING UP TO 10 TONS PER YEAR OF VOLATILE ORGANIC COMPOUNDS

September 29, 2000 Revised March 20, 2002

SUMMARY

On September 18, 2000, the Air Quality Division (AQD) of the Michigan Department of Environmental Quality (Department) issued the attached general permit to install for metal and/or plastic coating line(s) that emit up to ten tons per year (TPY) of volatile organic compounds (VOCs).

The applicability of the original general permit was based on the coating categories in Part 6 of the Air Pollution Control Rules. Metal and plastic coating lines were the only categories that were not subject to a Part 6 emission standard at the emission levels allowed by the general permit. However, other substrates that did not have Part 6 standards, but could meet the emission levels allowed by the general permit were overlooked. The general permit has been revised to include coating lines for substrates other than metal and/or plastic.

For this general permit to install:

- Coating line means an operation, which is a single series in a coating process and which is comprised of one or more coating applicators and any associated flash-off areas, drying areas, and ovens wherein one or more surface coatings are applied and subsequently dried or cured.
- Surface coating may include any paint, lacquer, varnish, adhesive, or other coating material applied on a surface.
- Surfaces include any substrate except cans, coils, large appliances, metal furniture, magnet wire, fabrics, paper, vinyl, flat wood paneling, or graphic arts lines.

This general permit to install is not intended to be a synthetic minor permit for Hazardous Air Pollutants (HAPs). A coating line that is subject to section 112(g) of the federal clean air act is not eligible to use this general permit to install and must obtain a New Source Review permit to install pursuant to Rule 201. A coating line subject to section 112(g) is one that has the potential to emit 10 tons per year of any one HAP or 25 tons per year of all HAPs combined. In addition, a coating line subject to any New Source Performance Standard (NSPS) for surface coating is not eligible to use this general permit.

The general permit to install may be used for one or more coating lines, each emitting up to 10 TPY of VOCs. Use of this general permit includes recordkeeping requirements to demonstrate that annual VOC emissions from each coating line are less than 10 TPY and combined VOC emissions from all coating lines at the stationary source do not exceed 30 TPY.

This general permit was issued pursuant to R 336.1201a of the Administrative Rules for Air Pollution Control (Rule 201a), and provides a streamlined permitting alternative for the affected facilities. Prior to finalizing the attached general permit, the Department held a 30-day public comment period on a proposed general permit. The final permit incorporates minor changes to the proposed permit, in response to the comments that were received.

BACKGROUND

Rule 201a allows the Department to issue a general permit to install covering numerous similar stationary sources, processes or process equipment, after public notice and opportunity for public participation. The use of general permits provides a streamlined permitting alternative for processes that meet the following general criteria:

- a) The processes must produce the same or reasonably similar products.
- b) The processes must emit the same or similar air contaminants.
- c) The method for capturing and controlling the air contaminants must be the same or limited to a small number of specific alternatives.
- d) The processes must be subject to the same emission limitations, monitoring requirements, federal standards, or state rules.

A person who owns or operates a stationary source, process or process equipment, which qualifies for a general permit to install approved by the Department, may apply for coverage under the terms and conditions of the general permit. Owners/operators who apply to the Department for coverage under the general permit to install must certify that the equipment they will be installing meets the necessary criteria for applicability and that they will comply with the special conditions of the permit. These conditions may include site restrictions, emission limits, material usage limits, and/or annual production limits, which are necessary to ensure that the equipment will operate in compliance with all applicable air pollution control rules. A person also has the option of applying for a case-by-case permit to install pursuant to Rule 201 if they are unable to comply with the conditions of the general permit to install.

Various facilities throughout the State of Michigan install and operate coating lines. On August 15, 2000 the Department proposed a general permit to streamline the review of permit applications from these facilities, and to allow the facilities more operational flexibility. The Department held a comment period from August 15, 2000 to September 14, 2000 to receive comments on the proposed general permit. The Department received one written comment after the close of the comment period. The comments were reviewed by AQD staff and considered for the final version of this general permit. The general permit for coating line(s) that emit up to 10 TPY of VOCs requires the following: use of High Volume Low Pressure (HVLP) spray applicators or equivalent technology with equal or better transfer efficiency; the use of dry filters or a water curtain to control particulates; and minimum stack height(s) of one and one half times the building height (from ground level to point of discharge). The use of a properly operated thermal or catalytic oxidizer to meet the requirements of the general permit is also acceptable.

APPLICABLE REQUIREMENTS

The following state and federal requirements are considered applicable to all sources, processes, or process equipment and are addressed in the General Conditions of the permit.

Citation	Description
R 336.1201a	State rule that gives the Department authority to issue general permits.
R 336.1219	State rule that requires written notification of change of ownership.
R 336.1285	State rule that allows the use of raw materials not listed in an approved permit.
R 336.1301	State rule that sets the standards for density of particulate emissions.
R 336.1370	State rule that requires the proper disposal of collected air contaminants.
R 336.1901	State rule that prohibits the emission of air contaminants, which interfere with
	the enjoyment of life and property and/or has injurious effects to health or safety.
R 336.1912	State rule that requires notice of abnormal conditions or malfunctions, which
	result in emissions in excess of the standards.
R 336.2001	State rules that allow the Department to request performance testing, and
2003, 2004	specify how the test should be conducted.

The following state and federal requirements are applicable to a coating line emitting up to 10 TPY of VOCs and were considered in the development of the general permit to install. These requirements are addressed in the Special Conditions of the permit.

<u>Citation</u> <u>Description</u>

- R 336.1702(d) State rule that outlines general provisions for new sources of Volatile Organic Compounds. This rule requires Best Available Control Technology (BACT) be applied to control VOC emissions from new sources. For a coating line emitting up to 10 TPY of VOCs proposed to be covered by this general permit to install, the use of High Volume Low Pressure (HVLP) spray applicators or equivalent technology with equal or better transfer efficiency is considered BACT for VOCs.
- R 336.1224 State rule that applies to sources of air toxics. This rule requires Best Available Control Technology for toxics (T-BACT) be applied to sources emitting air toxics. In the case of a coating line emitting up to 10 TPY of VOCs proposed to be covered by this general permit to install, meeting BACT for VOCs satisfies T-BACT for VOC based toxics. T-BACT for particulate-based toxics is the use of dry filters or a water curtain to control particulates.
- R 336.1225 State rule that prohibits the emissions of a Toxic Air Contaminant (TAC) in excess of a rate that results in a maximum ambient impact which is more than a health-based screening level. Based on MDEQ experience, a coating line emitting up to 10 TPY with minimum stack heights of one and one half times the building height (from ground level to point of discharge) meets the requirements of this rule. However, in the event that evidence indicates a failure to meet the requirements of Rule 225, the Department maintains the authority to require corrective action.

R 336.1910 State rule that requires a pollution control device be operated properly.

APPLICABILITY CRITERIA

To qualify for the general permit to install, based on the listed applicable requirements, each coating line must meet the following criteria:

- The general permit to install shall apply to a coating line where one or more surface coatings are applied to any substrate except cans, coils, large appliances, metal furniture, magnet wire, fabrics, paper, vinyl, flat wood paneling, or graphic arts lines.
- One general permit to install may be used for multiple coating lines at a given stationary source. A separate Process Information form EQP5759 must be completed for each coating line.
- A properly operated thermal oxidizer or catalytic oxidizer may be used to meet the requirements of this general permit. Proper operation of a thermal or catalytic oxidizer requires an overall minimum of 76% reduction of VOC emissions to the atmosphere.
- All coating applicators shall be High Volume-Low Pressure (HVLP) spray or equivalent technology with equal or better transfer efficiency (e.g., electrostatic spray, dip, flowcoat, roller, dip-spin).
- For a coating line using spray applicators, the coating line must include dry filters or a water curtain to control particulates.
- The exhaust gases from the coating line shall be discharged unobstructed vertically upwards to the ambient air at exit points not less than one and one half times the building height (from ground level to point of discharge).
- The general permit to install shall not apply to a source, process, or process equipment that is included in an existing permit to install pursuant to Rule 201 and is further referenced in an outstanding consent order or consent judgement.

- The emissions of VOCs from each coating line **and** purge and clean-up operations associated with the line covered by this general permit shall not exceed 2000 pounds per month nor 10.0 tons per year. The 10 TPY limit is based on a 12-month rolling time period as determined at the end of each calendar month.
- For any source using the general permit, the combined actual emissions of VOCs from all coating lines **and** all associated purge and clean-up operations at the stationary source shall not exceed 30.0 tons per year based on a 12-month rolling time period as determined at the end of each calendar month. This includes the combined emissions from any coating line covered by this or any other general permit, any permit to install issued pursuant to Rule 201, and any coating line exempt from the requirement to obtain a permit pursuant to Rule 287 and/or Rule 290.

PERMIT CONDITIONS

Attachment A lists the terms and special conditions of the general permit to install, and includes a list of definitions for this general permit. These terms and conditions prescribe the applicable site restrictions, performance standards, emission limits, monitoring, recordkeeping and reporting requirements which are necessary to ensure that a coating line will comply with all state and federal applicable requirements.

EMISSIONS

The allowed annual emission limits for this general permit, pursuant to the terms and special conditions, are based on a 12-month rolling time period as determined at the end of each calendar month. The monthly emission limit is adequate as a short-term emission limit and is federally enforceable.

APPLICATION FOR A GENERAL PERMIT

If the owner/operator of a coating line emitting up to 10 TPY of VOCs decides to install and operate the process under the terms of this general permit, then it is the responsibility of the owner/operator to apply to the Department for coverage under the general permit. Installation of equipment prior to granting of a permit to install, including a general permit to install, is a violation of Rule 201. Application forms, including all necessary information to determine qualification for and to ensure compliance with the general permit to install are available on the Internet as part of this document, or may be obtained by contacting Pam Knudsen at 517-373-7074. The Department Home Page is located at *http://www.michigan.gov/deq.*

The owner/operator shall submit the application forms to the AQD Permit Section. Upon receipt by the AQD, permit staff will review the application for completeness. The general permit to install for a coating line emitting up to 10 TPY of VOCs will be granted by the Department to qualifying sources, processes or process equipment, within 30 days of receipt of a complete application. Public comment will not be necessary for each application, since the public participation requirements will have been met by the public comment period on the general permit. Upon approval, the AQD will mail to the facility a copy of the general permit to install and a letter acknowledging that the facility owner/operator intends to install and operate the coating line in accordance with the terms and conditions of the general permit. The Department will maintain and make available to the public, upon request, a list of the persons that have been authorized to install and operate a stationary source, process or process equipment pursuant to each general permit to install issued by the Department.

ATTACHMENT A GENERAL CONDITIONS

- 1. The process or process equipment covered by this general permit to install shall not be reconstructed, relocated, or modified unless a Permit to Install pursuant to Rule 201 authorizing such action is issued by the Department, or an application for coverage under a General Permit to Install pursuant to Rule 201a, is submitted to and approved by the Department. For the purpose of a general permit to install, the permittee is defined as any person who owns or operates a process or process equipment at the source for which coverage under the general permit has been granted.
- 2. Operation of any process or process 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]**
- 3. Operation of this equipment shall not interfere with the attainment or maintenance of the air quality standard for any air contaminant. **[R336.1207(1)(b)]**
- 4. 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 conditions or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5).
- 5. Coverage under this general permit to install does not exempt the permittee from complying with any future regulation, which may be promulgated under Part 55 of 1994 PA 451.
- 6. Coverage under this general permit to install does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.
- 7. The permittee shall notify any public utility of any excavation, tunneling and discharging of explosives or demolition of buildings which may affect said utility's facilities in accordance with Act 53 of the Public Acts of 1974, being sections 460.701 to 460.718 of the Michigan Compiled laws and comply with each of the requirements of that Act.
- 8. The restrictions and conditions of this general permit to install shall apply to any person or legal entity which now or shall hereafter own or operate the equipment for which coverage under this general permit to install is issued. A written request to the Department for a change in ownership or operational control of the process or process equipment shall be made pursuant to Rule 219.
- 9. If the installation of the equipment for which coverage under this general permit to install has been issued, has not commenced within, or has been interrupted for, 18 months, then the general permit to install shall become void unless otherwise authorized by the Department as a condition of the permit. Furthermore, the permittee 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 or construction of the equipment allowed by this general permit to install. [R336.1201(4)]

ATTACHMENT A GENERAL CONDITIONS

- 10. Except as provided in subrules (2) and (3) or unless the special conditions of the general 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 a density greater than the most stringent of the following. The grading of visible emissions shall be determined in accordance with R336.1303. **[R336.1301(1)]**
 - 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 general permit to install.
- 11. 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]**
- 12. 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]**
- 13. Any required testing protocol shall conform to a format acceptable to the AQD. [R336.2003(1)]
- 14. Any required test results, which must be submitted to the AQD, shall conform to a format acceptable to the AQD. **[R336.2001(4)]**
- 15. Any air cleaning device shall be installed, maintained, and operated in a satisfactory manner and in accordance with the Michigan Air Pollution Control rules and existing law. **[R336.1910]**
- 16. Except as allowed by Rule 285(a), (b), and (c) the permittee shall not substitute any fuels, coatings, nor raw materials for those described in the application and allowed by this general 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.
- 17. For a stationary source that becomes a major source, as defined by R336.1211(1)(a), upon receipt of approval for coverage under this general permit to install, an administratively complete application for a renewable operating permit shall be submitted not more than 12 months after the stationary source commences operation as a major source. Commencing operation as a major source occurs upon commencement of trial operation of the new or modified process or process equipment that increased the potential to emit of the stationary source to more than or equal to the applicable major source definition specified in R336.1211(1)(a).
- 18. For a stationary source that is already a major source with an existing renewable operating permit, the source shall notify the Department of the installation of the process or process equipment covered by this general permit, pursuant to R336.1215(3) or apply for a modification pursuant to R336.1216(2) prior to commencing operation. The notification or application to modify the renewable operating permit shall be made using a form approved by the Department.

ATTACHMENT A CONTINUED SPECIAL CONDITIONS

I. DESIGN PARAMETERS		
A. Process Equipment	One or more coating lines, where each coating line is a single series in a coating	
Covered by General Permit	process and is comprised of one or more coating applicators and any associated	
	flash-off areas, drying areas, and ovens wherein one or more surface coatings are	
	applied and subsequently dried or cured. Coating lines may be used to coat any	
	substrate except cans, coils, large appliances, metal furniture, magnet wire, fabrics,	
	paper, vinyl, flat wood paneling, or graphic arts lines. (R 336.1201a(1))	
B. Pollution Control Equipment	For spray applications: Dry filters or a water curtain for particulate control. A properly	
	operated thermal oxidizer or catalytic oxidizer may be used to meet the requirements	
	of this general permit. Proper operation of a thermal or catalytic oxidizer requires an	
	overall minimum of 76% reduction of VOC emissions to the atmosphere. (R 336.1224,	
C. Coating Application Method	R 336.1910, R 336.1331, R 336.1702(d)) High volume-low pressure (HVLP) spray or equivalent technology with equal or better	
C. Coating Application Method	transfer efficiency (e.g., electrostatic spray, dip, flowcoat, roller, dip-spin).	
	(R 336.1702(d))	
D. Stack/Vent Parameters	The exhaust gases from the coating line shall be discharged unobstructed vertically	
	upwards to the ambient air at exit points not less than one and one half times the	
	building height (from ground level to point of discharge). (R 336.1225)	
II. MATERIAL USAGE/EMISSION		
A. Pollutant	Maximum Emission Limit/Applicable Requirement	
1. VOC	2000 pounds per calendar month, 10.0 tons per year, from each coating line and purge	
	and clean-up operations associated with the line covered by this general permit, based	
	on a 12-month rolling time period as determined at the end of each calendar month.	
2. VOC	(R 336.1225, R 336.1702(d))	
2. VOC	30.0 tons per year from all coating lines and all associated purge and clean-up operations at a stationary source, based on a 12-month rolling time period as	
	determined at the end of each calendar month. This includes the combined emissions	
	from any coating line covered by this or any other general permit, any permit to install	
	issued pursuant to Rule 201, and any coating line exempt from the requirement to	
	obtain a permit pursuant to Rule 287 and/or Rule 290. (R 336.1225, R 336.1702(d))	
III. COMPLIANCE EVALUATION		
	ned on file for a period of 5 years (R336.1201a(1))	
A. MONITO	RING/RECORDKEEPING - In Addition to General Conditions	
1. Parameter to be Recorded and Frequency	 Monthly record of purchase orders and invoices for all coatings, reducers, and purge/clean-up solvents. (R 336.1225, R 336.1702(d)) 	
	b) Monthly record of the VOC content in pounds per gallon of all reducers and	
	purge/clean-up solvents, the usage rate in gallons and disposal records. (R 336.1225, R 336.1702(d))	
	c) Monthly record of the VOC content in pounds per gallon of each coating and the usage rate in gallons. (R 336.1225, R 336.1702(d))	
	d) Monthly and annual VOC emission rate calculations for each coating line, in tons	
	per month and tons per 12-month rolling time period, using the method specified in Appendix B. (R 336.1225, R 336.1702(d))	
	e) Annual records, based upon a 12-month rolling time period, of the actual VOC emission rate in tons per year for all coating lines and associated purge and clean-up operations at the stationary source. (R 336.1702(d))	
	f) Date and description of any modification or new installation of process or control equipment for the coating line. (R 336.1201a(1))	
	 g) Date and description of any coating change or replacement on the coating line. (R 336.1201a(1)) 	

ATTACHMENT A CONTINUED SPECIAL CONDITIONS

A. MONITORING/F	A. MONITORING/RECORDKEEPING (continued) - In Addition to General Conditions		
1. Parameter to be Recorded and Frequency (continued)	 h) The permittee shall maintain a current listing of the chemical composition of each coating, including the weight percent of each component. The data may consist of material safety data sheets, manufacturer's formulation data, or both. The 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. (R 336.1225, R 336.1702(d)) i) For a coating line using add-on control to meet the requirements of this general permit, see Section VI for additional monitoring requirements. 		
2. Reports and Schedules	Submitted only upon request by the DEQ-AQD. (R 336.1201a(1))		
	B. TESTING - In Addition to General Conditions		
1. Parameter to be Tested	VOC emissions and VOC content in pounds per gallon of any coating, reducer or purge/clean-up solvent as applied or as received. (R 336.2001(1))		
2. Method/Analysis	40 CFR Part 60 EPA Method 25A; Method 24 or other EPA approved reference method. Upon prior approval of the district supervisor, AQD, VOC content of any coating or reducer may alternatively be determined from manufacturer's formulation data. (R 336.2004(1))		
3. Frequency/Schedule	Within 60 days if requested by the DEQ-AQD. (R 336.2001(2))		
4. Submittal of Test Results	Within 60 days following the last date of the test. (R 336.2001(4))		
IV. OPERATIONAL PARAMETERS			
1. All waste coatings and reducers	shall be captured and stored in closed containers and be disposed of in an acceptable		

manner in compliance with all applicable rules and regulations. (R 336.1702(d))

2. The permittee shall not operate any spray coating process unless dry filters or a water curtain is installed and operating properly. (R 336.1910, R 336.1331)

V. ALLOWED MODIFICATIONS

1. The permittee may replace a coating line (or any portion of, including control equipment), or may install a new or additional coating line (or any portion of, including control equipment) without applying for a new general permit to install application, provided all of the general permit to install applicability criteria will continue to be met after the replacement, modification or addition. (R 336.1201a(1))

2. The permittee shall update the general permit for any replacement, modification or addition, by submitting a new Process Information form EQP5759 to the Permit Section and the District Supervisor, listing all existing and new/additional equipment or coating line(s) a minimum of 10 days before the equipment is installed. **(R 336.1201a(1))**

3. The permittee may change or replace any coating used on the coating line without applying for a new general permit to install application, provided all of the general permit to install applicability criteria will continue to be met after the coating change. (R 336.1201a(1))

VI. FOR A COATING LINE USING ADD-ON CONTROL TO MEET THE REQUIREMENTS OF THIS GENERAL PERMIT.

1. For a coating line using a thermal oxidizer: Proper operation requires an overall minimum of 76% reduction of VOC emissions to the atmosphere. The oxidizer shall be operated at a minimum temperature of 1400°F and a minimum residence time of 0.5 seconds in the combustion chamber. **(R 336.1224, R 336.1910, R 336.1702(d))**

2. For a coating line using a thermal oxidizer: The permittee shall monitor and record the temperature in the thermal oxidizer near the combustion chamber outlet on a continuous basis, in a manner and with instrumentation acceptable to the Air Quality Division. All temperature data shall be kept on file for a period of at least five years and made available to the Department upon request. (R 336.1201a(1))

3. For a coating line using a catalytic oxidizer: Proper operation requires an overall minimum of 76% reduction of VOC emissions to the atmosphere. The oxidizer shall be operated at a minimum temperature of 600°F at the inlet of the catalyst bed. (R 336.1224, R 336.1910, R 336.1702(d))

ATTACHMENT A CONTINUED SPECIAL CONDITIONS

VI. FOR A COATING LINE USING ADD-ON CONTROL TO MEET THE REQUIREMENTS OF THIS GENERAL PERMIT.

4. For a coating line using a catalytic oxidizer: The permittee shall monitor and record the temperature at the inlet to the catalyst bed of the catalytic oxidizer at least every 15 minutes, in a manner and with instrumentation acceptable to the Air Quality Division. All temperature data shall be kept on file for a period of at least five years and made available to the Department upon request. (**R 336.1201a(1)**)

5. For a coating line using a thermal or catalytic oxidizer: The permittee shall keep records of the date, duration and description of any malfunction of the control equipment, any maintenance performed, any replacement of catalyst and any testing results. **(R 336.1201a(1))**

ATTACHMENT A CONTINUED APPENDIX A

DEFINITIONS

Coating line - an operation which is a single series in a coating process and which is comprised of one or more coating applicators and any associated flash-off areas, drying areas, and ovens wherein one or more surface coatings are applied and subsequently dried or cured.

Hazardous Air Pollutants (HAPs) - air pollutants that are not covered by ambient air quality standards but which, as defined in the Clean Air Act Amendments of 1990, may reasonably be expected to cause or contribute to irreversible illness or death. The list of HAPs currently contains 188 pollutants.

Organic Solvent - any volatile organic compound that is used as a diluent, thinner, dissolver, viscosity reducer, or cleaning agent or for other similar uses.

Solvent - A substance (usually a liquid) capable of dissolving or dispersing one or more substances.

Surface Coating - any paint, lacquer, varnish, ink, adhesive, or other coating material applied on a surface.

Toxic air contaminant (TAC) - any air contaminant for which there is no national ambient air quality standard and which is or may become harmful to public health or the environment when present in the outdoor atmosphere in sufficient quantities and duration. R 336.1120(f) lists the substances, which shall not be considered toxic air contaminants.

Transfer Efficiency - the percentage of coating solids material that leaves the coating applicator and remains on the surface of the product.

Volatile organic compound (VOC) - any compound of carbon or mixture of compounds of carbon that participates in photochemical reactions, excluding specific materials listed in R 336.1122(f), which do not contribute appreciably to the formation of ozone.

ATTACHMENT A CONTINUED APPENDIX B VOC Emission Calculations for 10 TPY Coating Line

COMPANY _____

PERMIT NUMBER

MONTH / YEAR _____

	Α	В	C = A x B
MATERIAL IDENTIFICATION (Coating, Reducer, Catalyst, or Purge/Clean-up Solvent)	MATERIAL USED (Gallons)*	VOC CONTENT (Pounds VOC / Gallon)	VOC EMISSIONS (Pounds)

Total pounds VOCs uncontrolled, $\mathbf{D} = \text{Sum of C}$ Total tons VOCs uncontrolled, $\mathbf{E} = D/2000$

D	
Е	

G

Н

J

Control Factor **F**: For a coating line using a properly operated thermal or catalytic oxidizer to meet the requirements of the general permit, $\mathbf{F} = 1-(76/100) = 0.24$. If uncontrolled, $\mathbf{F} = 1$

Total tons VOCs emitted this month, $\mathbf{G} = \mathbf{E} \times \mathbf{F}$

Total tons VOCs emitted 11 previous months, H = Sum of G for 11 previous months

Total tons VOCs emitted over 12-month period, J = G + H

J can not exceed 10 tons per year from each coating line, nor 30 tons per year from all coating lines at a stationary source. These limits include emissions from associated purge and clean-up operations.

* For purge/clean-up solvents, subtract amount reclaimed



Michigan Department Of Environmental Quality - Air Quality Division GENERAL PERMIT TO INSTALL APPLICATION GENERAL INFORMATION

Authorized under 1994 PA 451, as amended. Completion of form is required. Applicant may be subject to civil and/or criminal penalties for providing false information.

Instructions: Use this form to request authority to install and operate a source, process or process equipment under the terms and conditions of a general permit to install pursuant to Rule 201a. Prepare this form together with one or more of the forms identified in Item 19, according to type of source, process or process equipment, which will be installed and operated. Please submit all information, including forms, in duplicate. **NOTE:** This general permit does not apply to a source, process, or process equipment that is included in a Permit to Install pursuant to Rule 201 and is further referenced in an outstanding consent order or consent judgement.

1. FACILITY CODES			
STATE REGISTRATION NUMBER (SRN)	STANDARD	INDUSTRIAL CLASSIFICATION (S CODE	SIC)
2. APPLICANT NAME (Business license name of the corporation,)	partnership, individual	or government agency that ow	ns the facility)
3. APPLICANT MAILING ADDRESS (Street Address or P.O. Box N	umber)		
4. CITY	5. STATE	6. ZIP CODE	
7. NAME OF AUTHORIZED COMPANY MEMBER			
8. TITLE (person identified in Item 7)		9. TELEPHONE NO. (person) () -	identified in Item 7)
10. CONTACT PERSON (technical point of contact, if different than	n name in Item 7)	11. TELEPHONE NO. (contac () -	t person)
12. EQUIPMENT OR PROCESS LOCATION (complete Items 12 - 15	if different than mailin	g address)	
13. CITY	14. ZIP CODE	15. COUNTY	
16. EQUIPMENT IS (check one) New Existing	17. PRIOR AIR PERMI	T NO. (existing equipment only	/)
18. EQUIPMENT OR PROCESS INSTALLATION TIMETABLE (en	ter dates in Items 18a	a - 18d for those which appl	y)
FOR NEW EQUIPMENT (PROCESS INSTALLATION	I OR CONSTRUCTION)	18a. START DATE	18b. COMPLETION DATE
FOR EXISTING EQUIPMENT (PROCESS MODIFICA T	ION OR RELOCATION)	18c. START DATE	18d. COMPLETION DATE
19. THE FOLLOWING COMPLETED FORMS ARE ATTACHED TO	AND MADE A PART C	OF THIS PERMIT APPLICATIO	N (check all that apply)
TYPE OF FORM	1		NUMBER ATTACHED
EQP	umber and type of pro	PROCESS INFORMATION	
EQP5729 - ADDITIONAL INFORMATION Applicant Certification: I certify, under penalty of law, that this p under my direction or supervision in accordance with a system submitted. Based on my inquiry of the person or persons who may the information submitted is, to the best of my knowledge and b application meets the necessary criteria for applicability for a Ge conditions outlined in the General Permit to Install. I am aware	to ensure that qualifie anage the system, or the belief, true, accurate, a eneral Permit to Instal	ed personnel properly gather a hose persons directly respons nd complete. In addition, the I. Furthermore, I certify that	and evaluate the information ible for gathering information, e equipment described in this I can and will comply with all

possibility of fine and imprisonment for knowing violations. 20. SIGNATURE (person identified in Item 7)

21. DATE

Submit this completed application and the attachments identified in Item 19 to: PERMIT SECTION, AIR QUALITY DIVISION MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY DO DOX 202001 AMONO MIL (2020 7700

P.O. BOX 30260, LANSING, MI 48909-7760

DEQ USE ONLY - DO NOT WRITE BELOW	
DATE APPLICATION COMPLETE	DATE OF DETERMINATION OF NON-APPLICABILITY
DATE GENERAL PERMIT TO INSTALL GRANTED	SIGNATURE
DATE GENERAL PERMIT TO INSTALL REVOKED	SIGNATURE

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Michigan Department Of Environmental Quality - Air Quality Division GENERAL PERMIT TO INSTALL APPLICATION

FOR DEQ USE ONLY

ADDITIONAL INFORMATION

Authorized under 1994 PA 451, as amended. Completion of form is required if additional information is needed to make an application complete. Applicant may be subject to civil and/or criminal penalties for providing false information.

Instructions: Use this form to include additional information or attachmer	nts. Prepare and submit this form with General Information form (EQP5727).
1. FACILITY CODE	2. ID (Provide the identification number of the device, emission unit or
	stack/vent for which additional information is being submitted.)
STATE REGISTRATION NUMBER (SRN)	
3. WHAT TYPE OF ADDITIONAL INFORMATION ARE YOU SUBMITTING WI	TH THIS APPLICATION? (check all that apply)
ATTACHMENT (if checked, describe and list what is attached. Ma	ay include drawings, charts, calculations, assumptions, etc.)
TECHNICAL (Specialized information regarding the installation, co	onstruction, or use of a process or stack/vent)
GENERAL (Any supplemental information that is not technical info	ormation)
4. ADDITIONAL INFORMATION NARRATIVE (A brief description of the info	ormation or attachment. May include calculations, design parameters,
small diagrams, etc.)	



Michigan Department Of Environmental Quality - Air Quality Division **GENERAL PERMIT TO INSTALL APPLICATION**

FOR DEQ USE ONLY PERMIT NUMBER

PROCESS INFORMATION - 10 TPY COATING LINE

Authorized under 1994 PA 451, as amended. Completion of form is required. Applicant may be subject to civil and/or criminal penalties for providing false information.

Instructions: Use this form to request authority to install and operate a coating line under the terms and conditions of a general permit to install pursuant to Rule 201a. Complete a separate form for each coating line to be covered by the general permit. Prepare this form, the General Information form EQP5727 and any other forms identified in Item 19 of form EQP5727. For a Modification: Complete and certify this form and submit to the Permit Section and the District Supervisor. Clearly describe and identify all existing and new or additional equipment in Iten

	Clearly describe and identity all existing and	
1. FACILITY CODE		
STATE REGISTRATION NUMBER (SRN)		
	e , , , , , , , , , , , , , , , , , , ,) include the manufacturer, model, and dimensions. ole; and items/substrate to be coated. Use EQP5729 if
3. DO YOU HAVE AN EXISTING RENEWABLE OP		
YES, RENEWABLE OPERATING PERMIT NU		
	PPLICATION SUBMITTED, APPLICATION NUM	MBER:
unique identification number (ID) to the linkeyboard characters with no spaces betwee	ne and each stack. The ID may be a een characters. If this equipment alrea ase use the existing ID. If you choose t	ed stacks/vents should be linked, by assigning a any combination of up to 10 letters, numbers or ady has an ID assigned from a previous Permit to to leave Items 4 and 5 blank, we will assign the IDs
5. ASSOCIATED STACK/VENT ID (Assign ider	ntification numbers for all associated st	tacks/vents)
SV	SV	SV
SV SV	SV SV	SV SV
_	-	-
SV	SV D BY THIS GENERAL PERMIT (A separate Pr	SV rocess Information form must be
SV PROCESS INFORMATION 6. NUMBER OF COATING LINES TO BE COVERED	BY THIS GENERAL PERMIT (A separate Pr permit limits combined VOC emissions from	SV rocess Information form must be
SV PROCESS INFORMATION 6. NUMBER OF COATING LINES TO BE COVERED completed for each line. Use of the general	SV D BY THIS GENERAL PERMIT (A separate Preprint limits combined VOC emissions from the second s	SV rocess Information form must be om all coating lines at the source to 30 owcoat Other, Describe
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inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. In addition, the equipment described in this application meets the necessary criteria for applicability for a General Permit to Install. Furthermore, I certify that I can and will comply with all conditions outlined in the General Permit to Install. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

14. SIGNATURE OF AUTHORIZED EMPLOYEE

15. DATE

Attach this completed form to and submit it with form EQP5727, following the instructions given on EQP5727.