

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

AIR QUALITY DIVISION

**PART 6. EMISSION LIMITATIONS AND PROHIBITIONS— EXISTING SOURCES OF VOLATILE ORGANIC COMPOUND EMISSIONS**

**R 336.1621 Emission of volatile organic compounds from existing metallic surface coating lines.**

Rule 621. (1) A person shall not cause or allow the emission of volatile organic compounds from the coating of metallic surfaces from any existing coating line in excess of the applicable emission rates as follows:

(a) Four and three-tenths pounds of volatile organic compounds emitted per gallon of coating, minus water, as applied for clear coatings.

(b) Three and one-half pounds of volatile organic compounds emitted per gallon of coating, minus water, as applied for air-dried coatings.

(c) Three and one-half pounds of volatile organic compounds emitted per gallon of coating, minus water, as applied for extreme performance coatings.

(d) Four and eight-tenths pounds of volatile organic compounds emitted per gallon of coating, minus water, as applied for truck final repair coatings.

(e) Four and nine-tenths pounds of volatile organic compounds emitted per gallon of coating, minus water, as applied for glass adhesion body primer. For the purpose of this subdivision, “glass adhesion body primer” means the prime coating that is applied to automobile or truck bodies as part of the glass bonding system.

(f) Three pounds of volatile organic compounds emitted per gallon of coating, minus water, as applied for all other coatings.

(2) If the provisions of more than 1 subdivision of subrule (1) of this rule are applicable for a specific coating, the least stringent provision shall apply.

(3) Upon written request and approval by the commission, the emission limits specified in subrule (1) of this rule may be achieved by an equivalent emission limit expressed in pounds of volatile organic compounds emitted per gallon of applied coating solids. The equivalent emission limit shall be established by the following equation:

$$A = \frac{E}{S \frac{(TE)_b}{100}}$$

Where:

A = Allowable equivalent emission limit, pounds of volatile organic compounds per gallon of applied coating solids.

E = Applicable emission limit as specified in subrule (1) of this rule, pounds of volatile organic compounds per gallon of coating, minus water, as applied.

S = Solids volume fraction representative of a compliance coating, gallon of solids per gallon of coating, minus water, as applied. The value of “S” shall be determined by using the following equation:

$$S = 1 - \frac{E}{7.38}$$

(TE)<sub>b</sub> = Overall baseline transfer efficiency of the coating line as specified in subrule (4) of this rule, percent. Where multiple application methods are used on the coating line, the overall baseline transfer efficiency shall be determined using the method described in R 336.2040(9). Commission approval of the transfer efficiency test method is required.

(4) For the purpose of establishing an equivalent emission limit pursuant to subrule (3) of this rule, the value of (TE)<sub>b</sub>, the overall baseline transfer efficiency of the coating line, shall be 60%. Notwithstanding this provision, a person may request, in writing to the commission, and the commission may approve, a value for (TE)<sub>b</sub> which is less than 60%, but not less than 40%. A request for a value for (TE)<sub>b</sub> of less than 60% shall include a demonstration that the lower requested value is representative of the overall transfer efficiency achieved by similar coating lines which use the most efficient type of application equipment that is reasonably available for these similar coating lines.

(5) Not later than 3 months after the effective date of this rule and thereafter, a person who is responsible for the operation of a coating line that is subject to this rule shall obtain current information, and keep daily records necessary for the determination of compliance with the provisions of this rule, as required in R 336.2041.

(6) For each coating line, compliance with the emission limits specified in this rule shall be based upon all of the following:

(a) The volume-weighted average of all coatings which belong to the same coating category and which are used during each calendar day averaging period. The commission may specifically authorize compliance to be based upon a longer averaging period, which shall not exceed 1 calendar month.

(b) If coatings that belong to more than 1 coating category are used on the same coating line during the specified averaging period, then compliance shall be determined separately for each coating category.

(7) Compliance with the emission limits specified in this rule shall be determined using the applicable method described in the following subdivisions:

(a) For coating lines that are subject to the emission limits specified in subrule (1) of this rule, the method described in either R 336.2040(12)(a) if the coating line has no add-on emissions control device or R 336.2040(12)(b) if the coating line has 1 or more add-on emissions control devices.

(b) For coating lines subject to the equivalent emission limits specified in subrule (3) of this rule, the method described in either R 336.2040(12)(e) if the coating line has no add-on emissions control device or R 336.2040(12)(f) if the coating line has 1 or more add-on emissions control device.

(8) The provisions of this rule do not apply to the coating of metallic surfaces that are subject to the provisions of R 336.1610.

(9) The provisions of this rule do not apply to any of the following:

(a) Automobile refinishing.

(b) Customized top coating of less than 35 automobiles or trucks, or both, per day.

(c) Coating of the exterior of airplanes when the part to be coated has already been assembled on the airplane.

(d) Coating of the exterior of marine vessels when the part to be coated has already been

assembled on the marine vessel.

(e) Coating of a part consisting of both metallic and nonmetallic components if a demonstration is made, to the satisfaction of the commission, that the limits of this rule cannot be met due to the presence of the nonmetallic component. In this case, and if the nonmetallic component of this part is plastic and used as an automobile, truck, or business machine plastic part, the provisions of R 336.1632 shall apply to the coating of this part.

(10) The provisions of this rule, with the exception of the provisions in subrule (5) of this rule, do not apply to any of the following:

(a) Metallic surface coating lines which are not exempted from the provisions of this rule pursuant to the exemptions contained in subrules (8) and (9) of this rule, which are within a stationary source that is located in any of the following counties and which have a combined actual emission rate of volatile organic compounds of less than or equal to 15 pounds per day:

- (i) Kent.
- (ii) Livingston.
- (iii) Macomb.
- (iv) Monroe.
- (v) Muskegon.
- (vi) Oakland.
- (vii) Ottawa.
- (viii) St. Clair.
- (ix) Washtenaw.
- (x) Wayne.

If the combined actual emission rate exceeds 15 pounds per day for a subsequent day, then the provisions of this rule shall thereafter permanently apply to these coating lines.

(b) A metallic surface coating line which is not exempted from the provisions of this rule pursuant to the exemptions contained in subrules (8) and (9) of this rule, which is within a stationary source that is located in any county other than the counties identified in subdivision (a) of this subrule, and which has an actual emission rate of volatile organic compounds equal to or less than 2,000 pounds per month and 10.0 tons per year, if the total combined emission rate of volatile organic compounds from these exempted metallic surface coating lines at the stationary source does not exceed 30.0 tons per year. If the actual rate of emissions from an exempted metallic surface coating line exceeds 2,000 pounds per month for a subsequent month or 10.0 tons per year for a subsequent year, then the provisions of this rule shall thereafter permanently apply to that metallic surface coating line.

(c) Low-use coatings that total 55 gallons or less per rolling 12-month period at a stationary source.

(11) The provisions of this rule, with the exception of the provisions of subrule (5) of this rule, do not apply to coating lines which were exempt, based upon the provisions of subrules (9) and (10), from the provisions of R 336.1621 that were in effect on August 21, 1981, but which are now subject to the emission limit provisions of this rule, until 1 year after the effective date of this rule. A person who is responsible for a previously exempted coating line shall make a determination of compliance with the emission limits in this rule using the method specified in subrule (7) of this rule and shall submit a copy of this determination and supporting data to the commission not later than 1 year after the effective date of this rule.

(12) A person may discontinue the operation of a natural gas-fired afterburner, which is used to achieve compliance with the emission limits in this rule, between November 1 and March 31

unless the afterburner is used to achieve compliance with, or is required by, any of the following:

- (a) Any other provisions of these rules.
- (b) A permit to install.
- (c) A permit to operate.
- (d) A voluntary agreement.
- (e) A performance contract.
- (f) A stipulation.
- (g) An order of the commission.

(13) If the operation of a natural gas-fired afterburner is discontinued between November 1 and March 31 pursuant to the provisions of subrule (12) of this rule, both of the following provisions shall apply during this time period:

(a) All other provisions of this rule, except the emission limits, shall remain in effect.

(b) All other measures that are used to comply with the emission limits in this rule between April 1 and October 31 shall continue to be used.

History: 1979 ACS 7, Eff. Aug. 22, 1981; 1993 MR 4, Eff. Apr. 28, 1993.