MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY
AIR QUALITY DIVISION

Rule 290 Permit to Install Exemption: Sources with Limited Emissions Record

Rule 290 of the Michigan Air Pollution Control Rules

This record is provided as a courtesy for businesses by the Michigan Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division, Clean Air Assistance Program, and is not required to be returned or submitted to EGLE.

NOTE:

- Rule 290 of the Michigan Air Pollution Control Rules exempts an emission unit with limited emissions from having to apply for Permit to Install. Rule 201 requires sources to obtain a Permit to Install prior to the installation, construction, reconstruction, relocation, or modification of an emission unit. Sources using this exemption must not meet any of the criteria in Rule 278 and must be able to demonstrate compliance with the various emission limits contained in Rule 290.

- Utilization of this form is not the sole method of demonstrating compliance with the requirements of Rule 290, unless required by a permit such as a Renewable Operating Permit (ROP). For example, an alternative method of demonstrating compliance could be determining the emissions of air contaminants from a single unit of production and recording the number of production units generated per month.

- ROP subject sources – This document must be used to track emissions unless an alternate format has been approved by the District Supervisor or alternate format is cited in the ROP.

- An emission unit that emits an air contaminant, excluding noncarcinogenic Volatile Organic Compounds (VOCs) and noncarcinogenic, non-ozone forming materials listed in Rule 122(f), which has an Initial Threshold Screening Level (ITSL) or Initial Risk Screening Level (IRSL) less than 0.04 micrograms per cubic meter (ug/m3) cannot use Rule 290.

- For all emission units exempt pursuant to Rule 290 that emit particulate emissions which have an ITSL equal to or less than 2.0 ug/m3 and greater than or equal 0.04 ug/m3, the particulate emissions must be included in Section 2.

- For all emission units exempt pursuant to Rule 290 that emit particulate emissions which have an IRSL equal to or greater than 0.04 ug/m3, the particulate emissions must be included in Section 3.

- Perchloroethylene is the only non-ozone forming material listed in Rule 122(f) that is a carcinogen. Two of the stabilizers in Rule 122(f) Table 11, tertiary butyl alcohol and 1,2-butylene oxide, are carcinogenic and are ozone forming materials.

- If an emission unit is equipped with a control device (i.e., equipment that captures and/or destroys air contaminants) and the control device is not vital to production of the normal product of the process or to its normal operation, then there are two options of recording emissions in Sections 2, 3, and 4:
    1. record all uncontrolled emissions of air contaminants (i.e., all air contaminants entering the control device); or
    2. record all controlled emissions of air contaminants (all air contaminants leaving the control device).

  Whatever option is chosen, make sure that option is used consistently throughout Sections 2, 3, 4, and 5.

- If the emission unit is not equipped with a control device or the control device is vital to production of the normal product of the process or to its normal operation, then the quantity of each emission of air contaminant identified in Sections 2, 3, 4, and 5 should be recorded as uncontrolled emissions.

- Monthly emission records are required to be maintained on file for the most recent two-year period and made available to EGLE, Air Quality Division upon request. (ROP subject sources must keep records for the most recent five-year period.)

Please print or type all information.

1. COMPLETE FOR EACH EMISSION UNIT USING THE EXEMPTION IN RULE 290.

Facility Name:

Month/Year:

Description of emission unit (including control devices):

2. RECORD EMISSIONS OF NONCARCINOGENIC AIR CONTAMINANTS (EXCLUDING NONCARCINOGENIC VOCS AND NONCARCINOGENIC, NON-OZONE FORMING MATERIALS LISTED IN RULE 122(F)) *(see Appendix A)*

ITSL ≥ 2.0 ug/m3

(The emissions of noncarcinogenic particulate air contaminants with an ITSL > 2.0 ug/m3 do not have to be recorded in this table as long as the emission unit is in compliance with the requirements in Section 6.)

CAS #	Chemical Name	Uncontrolled Emissions (lbs/month)	Controlled Emissions (lbs/month)
Monthly Total		①	②

Compliance Criteria:

- The total in Box ① must be ≤ 1,000 pounds or the total in Box ② must be ≤ 500 pounds. If the total in Box ① or in Box ② is greater than the respective emission limitations, contact your local district office.

2.0 ug/m3 > ITSL ≥ 0.04 ug/m3			
CAS #	**Chemical Name**	**Uncontrolled Emissions (lbs/month)**	**Controlled Emissions (lbs/month)**
Monthly Total		③	④

Compliance Criteria:

- The total in Box ③ must be ≤ 20 pounds or the total in Box ④ must be ≤ 10 pounds. If the total in Box ③ or in Box ④ is greater than the respective emission limitations, contact your local district office.

3. RECORD EMISSIONS OF CARCINOGENIC AIR CONTAMINANTS

IRSL ≥ 0.04 ug/m3

(The emissions of carcinogenic particulate air contaminants with an IRSL ≥ 0.04 ug/m3 must be recorded in this table even though it is also exempt under Section 6.)

CAS #	**Chemical Name**	**Uncontrolled Emissions (lbs/month)**	**Controlled Emissions (lbs/month)**
Monthly Total		⑤	⑥

Compliance Criteria:

- The total in Box ⑤ must be ≤ 20 pounds or the total in Box ⑥ must be ≤ 10 pounds. If the total in Box ⑤ or in Box ⑥ is greater than the respective emission limitations, contact your local district office.

4. RECORD EMISSIONS OF ALL NONCARCINOGENIC VOCS AND NONCARCINOGENIC, NON-OZONE FORMING MATERIALS LISTED IN RULE 122(F) *(see Appendix A)*

CAS #	Chemical Name	Uncontrolled Emissions (lbs/month)	Controlled Emissions (lbs/month)
Monthly Total		⑦	⑧

Compliance Criteria:

- The total in Box ⑦ must be ≤ 1,000 pounds or the total in Box ⑧ must be ≤ 500 pounds. If the total in Box ⑦ or in Box ⑧ is greater than the respective emission limitations, contact your local district office.

5. RECORD TOTAL MONTHLY EMISSIONS

	lbs/month
Total uncontrolled emissions (Box ① + Box ③ + Box ⑤ + Box ⑦)	
Total controlled emissions (Box ② + Box ④ + Box ⑥ + Box ⑧)	

Compliance Criteria:

- The total uncontrolled emissions (Box ① + Box ③ + Box ⑤ + Box ⑦) must be ≤ 1,000 pounds. If the total uncontrolled emissions are greater than 1,000 pounds, contact your local district office; or
- The total controlled emissions (Box ② + Box ④ + Box ⑥ + Box ⑧) must be ≤ 500 pounds. If the total controlled emissions are greater than 500 pounds, contact your local district office.

6. NONCARCINOGENIC PARTICULATE AIR CONTAMINANTS

The emission unit may emit noncarcinogenic particulate air contaminants provided that the emission unit is in compliance with the following:

Y N

☐ ☐ Are the particulate emissions controlled by an appropriately designed and operated fabric filter collector or an equivalent control system which is designed to control particulate matter to a concentration of less than or equal to 0.01 pounds of particulate per 1,000 pounds of exhaust gases and which do not have an exhaust gas flow rate of more than 30,000 actual cubic feet per minute?

☐ ☐ Are the visible emissions from the emission unit not more than 5% opacity in accordance with the methods contained in Rule 303?

☐ ☐ Is the Initial Threshold Screening Level (ITSL) for each particulate air contaminant, excluding nuisance particulate $>$ 2.0 ug/m3?

Notes:

- Quantities of particulates being emitted from an emission unit complying with the requirements in this Section should not be included in Section 2.
- Quantities of noncarcinogenic particulates with an ITSL $\leq$ 2.0 ug/m3 and $\geq$ 0.04 ug/m3 must be included in Section 2.
- Quantities of carcinogenic particulates $\geq$ 0.04 ug/m3 must be included in Section 3.

Compliance Criteria:

- If any of the preceding questions concerning noncarcinogenic particulate air contaminants are answered "No", contact your local district office.

7. OTHER REQUIREMENTS

- Attach emission calculations to demonstrate compliance with the emission limits identified in Sections 2, 3, 4, and 5.
- Keep this record on file for a minimum of 2 years, if not required for a longer period from other requirements, i.e. ROP.

APPENDIX A

R 336.1122 Definitions; V.

Rule 122. As used in these rules:

(f) "**Volatile organic compound**" means any compound of carbon or mixture of compounds of carbon that participates in photochemical reactions, excluding the following materials, all of which have been determined by the United States environmental protection agency to have negligible photochemical reactivity:

(i) Carbon monoxide.

(ii) Carbon dioxide.

(iii) Carbonic acid.

(iv) Metallic carbides or carbonates.

(v) Boron carbide.

(vi) Silicon carbide.

(vii) Ammonium carbonate.

(viii) Ammonium bicarbonate.

(ix) Methane.

(x) Ethane.

(xi) The methyl chloroform portion of commercial grades of methyl chloroform, if all of the following provisions are complied with:

(A) The commercial grade of methyl chloroform is used only in a surface coating or coating line that is subject to the requirements of part 6 or 7 of these rules.

(B) The commercial grade of methyl chloroform contains no stabilizers other than those listed in table 11.

(C) Compliance with the applicable limits specified in part 6 or 7 of these rules is otherwise not technically or economically reasonable.

(D) All measures to reduce the levels of all organic solvents, including the commercial grade of methyl chloroform, from the surface coating or coating line to the lowest reasonable level will be implemented.

(E) The emissions of the commercial grade of methyl chloroform do not result in a maximum ambient air concentration exceeding any of the allowable ambient air concentrations listed in table 11.

(F) The use of the commercial grade of methyl chloroform is specifically identified and allowed by a permit to install, permit to operate, or order of the department.

(G) Table 11 reads as follows:

TABLE 11

Commercial grade of methyl chloroform --
allowable ambient air concentrations

Compound	ppm[1]	Time[2]
Methyl chloroform	3.5	1 hour
Tertiary butyl alcohol[3]	1.0	1 hour
Secondary butyl alcohol[3]	1.0	1 hour
Methylal[3]	10.0	1 hour
1,2-butylene oxide[3]	0.028 and 0.00041	1 hour annual

1. Parts per million, by volume
2. Averaging time period
3. This compound is a stabilizer

(xii) The methyl chloroform portion of commercial grades of methyl chloroform that contain any other stabilizer not listed in table 11 of this rule, if all of the following provisions are complied with:

(A) The commercial grade of methyl chloroform is used only in a surface coating or coating line that is subject to the requirements of part 6 or 7 of these rules.

(B) Compliance with the applicable limits specified in part 6 or 7 of these rules is otherwise not technically or economically reasonable.

(C) All measures to reduce the levels of all organic solvents, including the commercial grade of methyl chloroform, from the surface coating or coating line to the lowest reasonable level will be implemented.

(D) The emissions of any compound in the commercial grade of methyl chloroform that is listed in table 11 of this rule do not result in a maximum ambient air concentration exceeding any of the allowable ambient air concentrations listed in table 11.

(E) The emission of all compounds in the commercial grade of methyl chloroform that are not listed in table 11 is demonstrated to comply with R 336.1901.

(F) The use of the commercial grade of methyl chloroform is specifically identified and allowed by a permit to install, permit to operate, or order of the department.

(xiii) Acetone.

(xiv) Cyclic, branched, or linear completely methylated siloxanes.

(xv) Parachlorobenzotrifluoride.

(xvi) Perchloroethylene.

(xvii) Trichlorofluoromethane (CFC-11).

(xviii) Dichlorodifluoromethane (CFC-12).

(xix) 1,1,2-trichloro-1,2,2-trifluoroethane (CFC-113).

(xx) 1,2-dichloro 1,1,2,2-tetrafluoroethane (CFC-114).

(xxi) Chloropentafluoroethane (CFC-115).

(xxii) 1,1-dichloro 1-fluoroethane (HCFC-141b).

(xxiii) 1,chloro 1,1-difluoroethane (HCFC-142b).

(xxiv) Chlorodifluoromethane (HCFC-22).

(xxv) 1,1,1-trifluoro 2,2-dichloroethane (HCFC-123).

(xxvi) 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124).

(xxvii) Trifluoromethane (HFC-23).

(xxviii) Pentafluoroethane (HFC-125).

(xxix) 1,1,2,2-tetrafluoroethane (HFC-134).

(xxx) 1,1,1,2-tetrafluoroethane (HFC-134a).

(xxxi) 1,1,1-trifluoroethane (HFC-143a).

(xxxii) 1,1-difluoroethane (HFC-152a).

(xxxiii) 3,3-dichloro-1, 1,1,2,2-pentafluoropropane (HCFC-225ca).

(xxxiv) 1,3-dichloro-1,1,2,2,3-pentafluoropropane (HCFC-225cb).

(xxxv) 1,1,1,2,3,4,4,5,5,5-decafluoropentane (HFC 43-10mee).

(xxxvi) Difluoromethane (HFC-32).

(xxxvii) Ethyl fluoride (HFC-161).

(xxxviii) 1,1,1,3,3,3-hexafluoropropane (HFC-236fa).

(xxxix) 1,1,2,2,3-pentafluoropropane (HFC-245ca).

(xl) 1,1,2,3,3- pentafluoropropane (HFC-245ea).

(xli) 1,1,1,2,3- pentafluoropropane (HFC-245eb).

(xlii) 1,1,1,3,3- pentafluoropropane (HFC-245fa).

(xliii) 1,1,1,2,3,3-hexafluoropropane (HFC-236ea).

(xliv) 1,1,1,3,3-pentafluorobutane (HFC365mfc).

(xlv) Chlorofluoromethane (HCFC-31).

(xlvi) 1,2-dichloro-1,1,2-trifluoroethane (HCFC-123a).

(xlvii) 1-chlor-1-fluoroethane (HCFC-151a).

(xlviii) 1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxybutane.

(xlix) 2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane.

(l) 1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane.

(li) 2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane.

(lii) Methyl acetate.

(liii) Perfluorocarbon compounds that fall into the following classes:

(A) Cyclic, branched, or linear, completely fluorinated alkanes.
(B) Cyclic, branched, or linear, completely fluorinated ethers with no unsaturations.
(C) Cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations.
(D) Sulfur-containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.

(liv) Methylene chloride.

The methods described in R 336.2004 and R 336.2040 shall be used for measuring volatile organic compounds for purposes of determining compliance with emission limits. Where such a method also measures compounds with negligible photochemical reactivity, these negligibly photochemical reactive compounds may be excluded as volatile organic compounds if the amount of such compounds is accurately quantified and such exclusion is approved by the department.

History: 1979 ACS 1, Eff. Jan. 19, 1980; 1985 MR 2, Eff. Feb. 22, 1985; 1988 MR 5, Eff. May 20, 1988; 1989 MR 4, Eff. Apr. 19, 1989; 1993 MR 4, Eff. Apr. 28, 1993; 1997 MR 5, Eff. June 15, 1997; 2000 MR 18, Eff. November 30, 2000; 2003 MR 5, Eff. March 13, 2003.