



Air Permit Exemptions Which May Apply to Scrap Tire Facilities
Prepared for 02/26/2019 STAC Meeting by Dan McGeen, Air Quality Division

Michigan Air Pollution Control Rules 201, 285, 290, and 291

Rule 201 (partial, emphasis added):

- 1) Except as allowed in R 336.1202, R 336.1277 to R 336.1291, or R 336.2823(15) a person shall not install, construct, reconstruct, relocate, or modify any process or Process equipment, including control equipment pertaining thereto, which may emit any of the following, unless a permit to install that authorizes such action is issued by the department.
- a) Any air pollutant regulated by title I of the clean air act and its associated rules, including 40 C.F.R. §51.165 and §51.166, adopted by reference in R 336.1902.
 - b) Any air contaminant.

A person who plans to install, construct, reconstruct, relocate, or modify any such process or process equipment shall apply to the department for a permit to install on an application form approved by the department and shall provide the information required in R 336.1203.

Rule 285(2)(l)(vi), Permit to install exemptions, miscellaneous (partial, emphasis added):

- 2) The requirement of R 336.1201(1) to obtain a permit to install does not apply to any of the following:
- (l) The following equipment and any exhaust system or collector exclusively serving the equipment:
 - (vi) **Equipment for carving, cutting, routing, turning, drilling, machining, sawing, surface grinding, sanding, planing, buffing, sand blast cleaning, shot blasting, shot peening, or polishing ceramic artwork, leather, metals, graphite, plastics, concrete, rubber, paper board, wood, wood products, stone, glass, fiberglass, or fabric which meets any of the following:**
 - (A) Equipment used on a nonproduction basis.
 - (B) **Equipment that has emissions that are released only into the general in-plant environment.**
 - (C) **Equipment that has externally vented emissions controlled by an appropriately designed and operated fabric filter collector that, for all specified operations with metal, is preceded by a mechanical precleaner.**

R 336.1290 Permit to install exemptions; emission units with limited emissions.

- (1) This rule does not apply if prohibited by R 336.1278 and unless the requirements of R 336.1278a have been met.
- (2) The requirement of R 336.1201(1) to obtain a permit to install does not apply to any of the emission units listed in subdivision (a) of this subrule, if the conditions listed in subdivisions (b), (c), (d), and (e) of this subrule are met. Notwithstanding the definition in R 336.1121(a), for the purpose of this rule, uncontrolled emissions are the emissions from an emission unit based on actual operation, not taking into account any emission control equipment. Controlled emissions are the emissions from an emission unit based on actual operation, taking into account the control equipment.
- (a) An emission unit which meets any of the following criteria:
 - (i) Any emission unit that emits only noncarcinogenic volatile organic compounds or noncarcinogenic materials that are listed in R 336.1122(f) as not contributing appreciably to the formation of ozone, if the total uncontrolled or controlled emissions of air contaminants are not more than 1,000 or 500 pounds per month, respectively.

- (ii) Any emission unit for which the CO₂ equivalent emissions are not more than 6,250 tons per months, the uncontrolled or controlled emissions of all other air contaminants are not more than 1,000 or 500 pounds per month, respectively, and all of the following criteria are met:
 - (A) For toxic air contaminants, excluding noncarcinogenic volatile organic compounds and noncarcinogenic materials that are listed in R 336.1122(f) as not contributing appreciably to the formation of ozone, with initial threshold screening levels greater than or equal to 0.04 micrograms per cubic meter and less than 2.0 micrograms per cubic meter, the total uncontrolled or controlled emissions shall not exceed 20 or 10 pounds per month, respectively.
 - (B) For toxic air contaminants with initial risk screening levels greater than or equal to 0.04 micrograms per cubic meter, the total uncontrolled or controlled emissions shall not exceed 20 or 10 pounds per month, respectively.
 - (C) The emission unit shall not emit any toxic air contaminants, excluding noncarcinogenic volatile organic compounds and noncarcinogenic materials that are listed in R 336.1122(f) as not contributing appreciably to the formation of ozone, with an initial threshold screening level or initial risk screening level less than 0.04 micrograms per cubic meter.
 - (D) For total mercury, the uncontrolled or controlled emissions shall not exceed 0.01 pounds per month.
 - (E) For lead, the uncontrolled or controlled emissions shall not exceed 16.7 pounds per month.
- (iii) Any emission unit that emits only particulate air contaminants without initial risk screening levels and other air contaminants that are exempted under paragraph (i) or (ii) of this subdivision if all of the following provisions are met:
 - (A) The particulate emissions are controlled by an appropriately designed and operated fabric filter collector or an equivalent control system that 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 that do not have an exhaust gas flow rate more than 30,000 actual cubic feet per minute.
 - (B) The visible emissions from the emission unit are not more than 5% opacity in accordance with the methods contained in R 336.1303.
 - (C) The initial threshold screening level for each particulate toxic air contaminant, excluding nuisance particulate, is more than 2.0 micrograms per cubic meter.
- (b) The following requirements apply to emission units utilizing control equipment:
 - (i) An air cleaning device for volatile organic compounds shall be installed, maintained, and operated in accordance with the manufacturer's specifications. Examples include the following:
 - (A) Oxidizers and condensers equipped with a continuously displayed temperature indication device.
 - (B) Wet scrubbers equipped with a liquid flow rate monitor.
 - (C) Dual stage carbon absorption where the first canister is monitored for breakthrough and replaced if breakthrough is detected.
 - (ii) An air cleaning device for particulate matter shall be installed, maintained, and operated in accordance with the manufacturer's specifications or the owner or operator shall develop a plan that provides to the extent practicable for the maintenance and operation of the equipment in the manner consistent with good air pollution control practices for minimizing emissions. It shall also be equipped to monitor appropriate indicators of performance, for example, static pressure drop, water pressure, and water flow rate.
- (c) A description of the emission unit is maintained throughout the life of the unit.
- (d) Records of material use and calculations identifying the quality, nature, and quantity of the air contaminant emissions are maintained in sufficient detail to demonstrate that the emissions meet the emission limits outlined in this rule. Volatile organic compound emissions shall be calculated using mass balance, generally accepted engineering calculations, or another method acceptable to the department.
- (e) The records are maintained on file for the most recent 2-year period and are made available to the department upon request.

R 336.1291 Permit to install exemptions; emission units with “de minimis” emissions.

- (1) This rule does not apply if prohibited by R 336.1278 and unless the requirements of R 336.1278a have been met.
- (2) **The requirement of R 336.1201(1) to obtain a permit to install does not apply to any emission unit in which potential emissions meet the conditions listed in subdivisions (a) to (d) of this subrule and table 23 for all air contaminants listed. In addition, records shall be maintained in accordance with subdivisions (e) and (f) of this subrule. (Emphasis added.)**
- (a) The combined potential emissions of all toxic air contaminants with screening levels greater than or equal to 0.04 micrograms per cubic meter and less than 2 micrograms per cubic meter shall not exceed 0.12 tons per year.
- (b) The combined potential emissions of all toxic air contaminants with screening levels greater than or equal to 0.005 micrograms per cubic meter and less than 0.04 micrograms per cubic meter shall not exceed 0.06 tons per year.
- (c) The combined potential emissions of all toxic contaminants with screening levels less than 0.005 micrograms per cubic meter shall not exceed 0.006 tons per year.
- (d) The emission unit has no potential emissions of asbestos and/or subtilisin proteolytic enzymes.
- (e) A description of the emission unit shall be maintained throughout the life of the unit.
- (f) **Documentation and/or calculations identifying the quality, nature, and quantity of the air contaminant emissions are maintained in sufficient detail to demonstrate that the potential emissions are less than those listed in subdivisions (a) to (d) of this subrule and Table 23. (Emphasis added.)** Such documentation shall include the toxic air contaminant screening level applicable at the time of installation and/or modification of the emission unit.

Table 23. Potential Emissions from Air Contaminants

Air Contaminant	Potential Emissions Not to be Exceeded
CO ₂ equivalent	75,000 tons per year
CO	10 tons per year
NO _x	10 tons per year
SO ₂	10 tons per year
VOC (as defined in R 336.1122)	5 tons per year
PM (emphasis added)	10 tons per year
PM-10 (emphasis added)	5 tons per year
PM-2.5 (emphasis added)	3 tons per year
Lead	0.1 tons per year
Fluorides	1 ton per year
Sulfuric acid mist	0.12 tons per year
Hydrogen sulfide	2 tons per year
Total reduced sulfur	2 tons per year
Reduced sulfur compounds	2 tons per year
Total mercury	0.12 pounds per year
Total toxic air contaminants not listed in table 23 with any screening level	5 tons per year
Total air contaminants not listed in table 23 that are non-carcinogenic and do not have a screening level	6 tons per year