

# **Air Permit to Install EXEMPTION HANDBOOK**

Michigan Air Pollution Control Rules

R336.1278 – R 336.1291 (Rules 278 – 291)

**FEBRUARY 2020**



MICHIGAN DEPARTMENT OF  
ENVIRONMENT, GREAT LAKES, AND ENERGY

The Michigan Air Pollution Control Rules can be accessed in their entirety at [Michigan.gov/Air](http://Michigan.gov/Air) (select “State Air Laws and Rules” then “Air Pollution Control Rules”).

## Significance Levels (From Rule 119)

Air Contaminant	Emission Rate
Carbon monoxide	100 TPY
Nitrogen oxides	40 TPY
Sulfur dioxide	40 TPY
Particulate matter	25 TPY
PM-10	15 TPY
PM-2.5	10 TPY
Volatile organic compounds	40 TPY
Lead	0.6 TPY
Fluorides	3 TPY
Sulfuric acid mist	7 TPY
Hydrogen Sulfide (H <sub>2</sub> S)	10 TPY
Total reduced sulfur compounds (including H <sub>2</sub> S)	10 TPY
Reduced sulfur compounds (including H <sub>2</sub> S)	10 TPY
Municipal waste combustor organics, measured as total tetra-through octachlorinated dibenzo-p-dioxins and dibenzofurans	3.2x10 <sup>-6</sup> Mg/year or 3.2x10 <sup>-6</sup> TPY
Municipal waste combustor metals (as PM)	14 Mg/year or 15 TPY
Municipal waste combustor acid gases (measured as SO <sub>2</sub> and HCL)	36 Mg/year or 40 TPY
Municipal solid waste landfill emissions (measured as nonmethane organic compounds)	45 Mg/year or 50 TPY

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## **R 336.1278 Exclusion from exemption.**

### **Rule 278.**

- (1) The exemptions specified in R 336.1280 to R 336.1291 do not apply to either of the following:
  - (a) Any activity that is subject to prevention of significant deterioration of air quality regulations or new source review for major sources in nonattainment areas regulations.
  - (b) Any activity that results in an increase in actual emissions greater than the significance levels defined in R 336.1119. For the purpose of this rule, "activity" means the concurrent and related installation, construction, reconstruction, relocation, or modification of any process or process equipment.
- (2) The exemptions specified in R 336.1280 to R 336.1291 do not apply to the construction of a new major source of hazardous air pollutants or reconstruction of a major source of hazardous air pollutants, as defined in 40 C.F.R. §63.2 and subject to §63.5(b)(3), national emission standards for hazardous air pollutants, adopted by reference in R 336.1902.
- (3) The exemptions specified in R 336.1280 to R 336.1291 do not apply to a construction or modification as defined in and subject to 40 C.F.R. part 61, national emission standards for hazardous air pollutants, adopted by reference in R 336.1902.
- (4) The exemptions in R 336.1280 to R 336.1291 apply to the requirement to obtain a permit to install only and do not exempt any source from complying with any other applicable requirement or existing permit limitation.

History: 1993 AACS; 1994 AACS; 1995 AACS; 1996 AACS; 1997 AACS; 1998 AACS; 2003 AACS; 2008 AACS; 2016 AACS.

## **R 336.1278a Scope of permit exemptions.**

### **Rule 278a.**

- (1) To be eligible for a specific exemption listed in R 336.1280 to R 336.1291, any owner or operator of an exempt process or exempt process equipment must be able to provide information demonstrating the applicability of the exemption. The demonstration may include the following information:
  - (a) A description of the exempt process or process equipment, including the date of installation.
  - (b) The specific exemption being used by the process or process equipment.
  - (c) An analysis demonstrating that R 336.1278 does not apply to the process or process equipment.
- (2) The demonstration required by this rule shall be provided within 30 days of a written request from the department. Any other records required within a specific exemption shall be provided within timeframes established within that specific exemption.

History: 2003 AACS; 2016 AACS.

## **R 336.1279 Rescinded.**

History: 1993 AACS; 1995 AACS; 2003 AACS.

## **R 336.1280 Permit to install exemptions; cooling and ventilating equipment.**

### **Rule 280.**

- (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 following:
  - (a) Cold storage refrigeration equipment and storage of the refrigerant, including cold storage equipment using anhydrous ammonia that has storage capacity of less than 500 gallons.
  - (b) Comfort air conditioning or comfort ventilating systems not designed or used to remove air contaminants generated by, or released from, specific units of equipment.
  - (c) Natural draft hoods or natural draft ventilation not designed or used to remove air contaminants generated by, or released from, specific units of equipment.
  - (d) Water-cooling towers and water-cooling ponds not used for evaporative cooling of process water or not used for evaporative cooling of water from barometric jets or from barometric condensers.
  - (e) Funeral home embalming processes and associated ventilation systems.

History: 1980 AACS; 1993 AACS; 1995 AACS; 2016 AACS.

## **R 336.1281 Permit to install exemptions; cleaning, washing, and drying equipment.**

### **Rule 281.**

- (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 following:
  - (a) Vacuum-cleaning systems used exclusively for industrial, commercial, or residential housekeeping purposes.
  - (b) Equipment used for portable steam cleaning.
  - (c) Blast-cleaning equipment using a suspension of abrasive in water and any exhaust system or collector serving them exclusively.
  - (d) Portable blast-cleaning equipment equipped with appropriately designed and operated enclosure and control equipment.

- (e) Equipment used for washing or drying materials, where the material itself cannot become an air contaminant, if no volatile organic compounds that have a vapor pressure greater than 0.1 millimeter of mercury at standard conditions are used in the process and no oil or solid fuel is burned.
- (f) Laundry dryers, extractors, or tumblers for fabrics cleaned with only water solutions of bleach, detergents, or laundry products that do not contain volatile organic compounds.
- (g) Dry-cleaning equipment that has a capacity of 100 or less pounds of clothes.
- (h) Cold cleaners that have an air/vapor interface of not more than 10 square feet.
- (i) Sterilization equipment processing mercury-free materials at medical and pharmaceutical facilities using steam, hydrogen peroxide, peracetic acid, or a combination thereof.
- (j) Portable blast-cleaning equipment used during construction to clean water tanks or other structures that have not been previously coated, if both of the following apply:
  - (i) The tank or structure is not located closer than the lesser of 750 feet or 5 times the height of the structure to the nearest residential, commercial, or public facility.
  - (ii) The abrasive media is a low dusting material that does not contain more than 5% crystalline silica.
- (k) Aqueous based parts washers.

History: 1980 AACS; 1992 AACS; 1993 AACS; 1995 AACS; 2003 AACS; 2008 AACS; 2016 AACS.

## **R 336.1282 Permit to install exemptions; furnaces, ovens, and heaters.**

### **Rule 282.**

- (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 following:
  - (a) Any of the following processes or process equipment which are electrically heated or which fire sweet gas fuel or no. 1 or no. 2 fuel oil at a maximum total heat input rate of not more than 10,000,000 Btu per hour:
    - (i) Furnaces for heat treating or forging glass or metals, the use of that does not involve ammonia, molten materials, oil-coated parts, or oil quenching.
    - (ii) Porcelain enameling furnaces or porcelain enameling drying ovens.
    - (iii) Kilns for firing ceramic ware.
    - (iv) Crucible furnaces, pot furnaces, or induction melting and holding furnaces that have a capacity of 1,000 pounds or less each, in which sweating or distilling is not conducted and in which fluxing is not conducted utilizing free chlorine, chloride or fluoride derivatives, or ammonium compounds.

- (v) Bakery ovens and confection cookers where the products are edible and intended for human consumption.
  - (vi) Electric resistance melting and holding furnaces that have a capacity of not more than 6,000 pounds per batch and 16,000 pounds per day, which melt only clean charge. Fluxing that results in the emission of any hazardous air pollutant shall not occur in the furnace.
- (b)** Fuel-burning equipment which is used for space heating, service water heating, electric power generation, oil and gas production or processing, or indirect heating and which burns only the following fuels:
- (i) Sweet natural gas, synthetic natural gas, liquefied petroleum gas, or a combination thereof and the equipment has a rated heat input capacity of not more than 50,000,000 Btu per hour.
  - (ii) No. 1 and no. 2 fuel oils, distillate oil, the gaseous fuels specified in paragraph (i) of this subdivision, or a combination thereof that contains not more than 0.40% sulfur by weight and the equipment has a rated heat input capacity of not more than 20,000,000 Btu per hour.
  - (iii) Wood, wood residue, or wood waste that is not painted or treated with wood preservatives, which does not contain more than 25% plywood, chipboard, particleboard, and other types of manufactured wood boards, that is not contaminated with other waste materials, and the equipment has a rated heat input capacity of not more than 6,000,000 Btu per hour.
  - (iv) Waste oil or used oil fuels that are generated on the geographical site and the equipment has a rated heat input capacity of not more than 500,000 Btu per hour.
- (a)** Fuel-burning and refuse-burning equipment used in connection with a structure that is designed and used exclusively as a dwelling for not more than 3 families.
- (b)** All residential cooking equipment.
- (c)** Equipment, including smokehouses, at restaurants and other retail or institutional establishments that is used for preparing food for human consumption.
- (d)** Blacksmith forges.
- (e)** Sour gas-burning equipment, if the actual emission of sulfur dioxide does not exceed 1 pound per hour.

History: 1980 AACS; 1992 AACS; 1993 AACS; 1995 AACS; 2003 AACS; 2016 AACS.

## **R 336.1283 Permit to install exemptions; testing and inspection equipment.**

### **Rule 283.**

- (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 following:
  - (a) Pilot processes or pilot process equipment utilizing T-BACT used for any of the following:
    - (i) Chemical analysis.
    - (ii) Physical analysis.
    - (iii) Empirical research.
    - (iv) Theoretical research.
    - (v) The development of process or process equipment design and operating parameters.
    - (vi) The production of a product for field testing.
    - (vii) The production of a product for clinical testing of pharmaceuticals.
    - (viii) The production of a product for use as a raw material in the research and development of a different product.
  - (a) Laboratory equipment.
  - (b) Equipment used for hydraulic or hydrostatic testing.
  - (c) Equipment for the inspection of metal, wood, or plastic products.
  - (d) Vacuum pumps for the leak-testing of metal products using helium or nitrogen gas.
  - (e) Process sample valves used to collect material exclusively for testing and inspection.
- (3) The pilot processes and pilot process equipment excluded from the requirement of R 336.1201(1) pursuant to the provisions of subrule (2)(a) of this rule do not include pilot processes or pilot process equipment used for any of the following:
  - (a) The production of a product for sale, unless such sale is only incidental to the use of the pilot process or pilot process equipment.
  - (b) The repetitive production of a product using the same process or process equipment design and operating parameters.
  - (c) The production of a product for market testing or market development.
  - (d) The treatment or disposal of waste which is designated, by listing or specified characteristic, as hazardous under federal regulations or state rules.

History: 1980 AACS; 1992 AACS; 1995 AACS; 1997 AACS; 2016 AACS.

## **R 336.1284 Permit to install exemptions; containers.**

### **Rule 284.**

- (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 containers, reservoirs, or tanks used exclusively for any of the following:
  - (a) Dipping or storage operations for coating objects with oils, waxes, greases, or natural or synthetic resins containing no organic solvents.
  - (b) Storage of butane, propane, or liquefied petroleum gas in a vessel that has a capacity of less than 40,000 gallons.
  - (c) Storage and surge capacity of lubricating, hydraulic, and thermal oils and indirect heat transfer fluids.
  - (d) Storage of no. 1 to no. 6 fuel oils as specified in ASTM D396, gas turbine fuel oils No. 2-GT to 4-GT as specified in ASTM D2880, aviation gas as specified in ASTM D910, jet fuels as specified in ASTM D1655, diesel fuel oils no. 2-D and 4-D as specified in ASTM D975, or biodiesel fuel oil and blends as specified in ASTM D6751 and ASTM D7467. The ASTM methods are adopted by reference in R 336.1902.
  - (e) Storage of sweet crude or sweet condensate in a vessel that has a capacity of less than 40,000 gallons.
  - (f) Storage of sour crude or sour condensate in a vessel that has a capacity of less than 40,000 gallons if vapor recovery or its equivalent is used to prevent the emission of vapors to the atmosphere.
  - (g) Storage and handling equipment for gasoline, gasoline blends including ethanol, diesel fuel, or natural gas as follows:
    - (i) Loading facilities handling less than 20,000 gallons per day for storage, mixing, blending, and handling of gasoline, and/or gasoline/ethanol blends, or for diesel fuel storage and handling.
    - (ii) Dispensing facilities for storage, mixing, blending and handling of gasoline and/or gasoline/ethanol blends, for natural gas storage and handling, or for diesel fuel storage and handling.
    - (iii) Equipment exclusively serving dynamometer facilities for gasoline and/or gasoline/ethanol blends storage and handling, for natural gas storage and handling, or for diesel fuel storage and handling.
  - (h) Storage and water dilution of aqueous solutions of inorganic salts, bases, and the following acids:
    - (i) Sulfuric acid that is not more than 99% by weight.
    - (ii) Phosphoric acid that is not more than 99% by weight.
    - (iii) Nitric acid that is not more than 20% by weight.

(iv) Hydrochloric acid that is not more than 11% by weight.

- (i) Storage, mixing, blending, or transfer operations of volatile organic compounds or noncarcinogenic liquids in a vessel that has a capacity of not more than 40,000 gallons where the contents have a true vapor pressure of not more than 1.5 psia at the actual storage conditions.
- (j) Pressurized storage of acetylene, hydrogen, oxygen, nitrogen, helium, and other substances, excluding chlorine and anhydrous ammonia in a quantity of more than 500 gallons, that have a boiling point of 0 degrees Celsius or lower.
- (k) Storage containers and transfer operations of noncarcinogenic solid material, including silos, that only emit particulate matter and that are controlled with an appropriately designed and operated fabric filter collector system or an equivalent control system.
- (l) Filling of noncarcinogenic liquids in shipping or storage containers that have emissions that are released only into the general in-plant environment.
- (m) Storage of wood and wood residues.
- (n) Storage of methanol in a vessel that has a capacity of not more than 30,000 gallons.

History: 1980 AACS; 1992 AACS; 1993 AACS; 1995 AACS; 1997 AACS; 2003 AACS; 2008 AACS; 2016 AACS.

## **R 336.1285 Permit to install exemptions; miscellaneous.**

### **Rule 285.**

- (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 following:
  - (a) Routine maintenance, parts replacement, or other repairs that are considered by the department to be minor, or relocation of process equipment within the same geographical site not involving any appreciable change in the quality, nature, quantity, or impact of the emission of an air contaminant therefrom. Examples of parts replacement or repairs considered by the department to be minor include the following:
    - (i) Replacing bags in a baghouse.
    - (ii) Replacing wires, plates, rappers, controls, or electric circuitry in an electrostatic precipitator that does not measurably decrease the design efficiency of the unit.
    - (iii) Replacement of fans, pumps, or motors that does not alter the operation of a source or performance of air pollution control equipment.
    - (iv) Boiler tubes.
    - (v) Piping, hoods, and ductwork.
    - (vi) Replacement of engines, compressors, or turbines as part of a normal maintenance program.

- (b) Changes in a process or process equipment which do not involve installing, constructing, or reconstructing an emission unit and which do not involve any meaningful change in the quality and nature or any meaningful increase in the quantity of the emission of an air contaminant therefrom.

  - (i) Examples of such changes in a process or process equipment include, but are not limited to, the following:

    - (A) Change in the supplier or formulation of similar raw materials, fuels, or paints and other coatings.
    - (B) Change in the sequence of the process.
    - (C) Change in the method of raw material addition.
    - (D) Change in the method of product packaging.
    - (E) Change in temperature, pressure, or other similar operating parameters that do not affect air cleaning device performance.
    - (F) Installation of a floating roof on an open top petroleum storage tank.
    - (G) Replacement of a fuel burner in a boiler with an equally or more thermally efficient burner.
    - (H) Lengthening a paint drying oven to provide additional curing time.
- (c) Changes in a process or process equipment that do not involve installing, constructing, or reconstructing an emission unit and that involve a meaningful change in the quality and nature or a meaningful increase in the quantity of the emission of an air contaminant resulting from any of the following:

  - (i) Changes in the supplier or supply of the same type of virgin fuel, such as coal, no. 2 fuel oil, no. 6 fuel oil, or natural gas.
  - (ii) Changes in the location, within the storage area, or configuration of a material storage pile or material handling equipment.
  - (iii) Changes in a process or process equipment to the extent that such changes do not alter the quality and nature, or increase the quantity, of the emission of the air contaminant beyond the level which has been described in and allowed by an approved permit to install, permit to operate, or order of the department.
- (d) Reconstruction or replacement of air pollution control equipment with equivalent or more efficient equipment.
- (e) Installation, construction, or replacement of air pollution control equipment for an existing process or process equipment for the purpose of complying with the national emission standards of hazardous air pollutants regulated under section 112 of the clean air act.
- (f) Installation or construction of air pollution control equipment for an existing process or process equipment if the control equipment itself does not actually generate a significant amount of criteria air contaminants as defined in R 336.1119(e) or a meaningful increase in the quantity of the emissions of toxic air contaminants or a meaningful change in the quality and nature of toxic air contaminants.

- (g) Internal combustion engines that have less than 10,000,000 Btu/hour maximum heat input.
- (h) Vacuum pumps in laboratory or pilot plant operations.
- (i) Brazing, soldering, welding, or plasma coating equipment.
- (j) Portable torch cutting equipment that does not cause a nuisance or adversely impact surrounding areas and is used for either of the following:
  - (i) Activities performed on a non-production basis, such as maintenance, repair, and dismantling.
  - (ii) Scrap metal recycling and/or demolition activities that have emissions that are released only into the general in-plant environment and/or that have externally vented emissions equipped with an appropriately designed and operated enclosure and fabric filter.
- (k) Grain, metal, or mineral extrusion presses.
- (l) The following equipment and any exhaust system or collector exclusively serving the equipment:
  - (i) Equipment used exclusively for bending, forming, expanding, rolling, forging, pressing, drawing, stamping, spinning, or extruding either hot or cold metals.
  - (ii) Die casting machines.
  - (iii) Equipment for surface preparation of metals by use of aqueous solutions, except for acid solutions.
  - (iv) Atmosphere generators used in connection with metal heat treating processes.
  - (v) Equipment used exclusively for sintering of glass or metals, but not exempting equipment used for sintering metal-bearing ores, metal scale, clay, flyash, or metal compounds.
  - (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.
  - (vii) Photographic process equipment by which an image is reproduced upon material sensitized to radiant energy, including any of the following:
    - (A) Blueprint machines.

- (B) Photocopiers.
- (C) Mimeograph machines.
- (D) Photographic developing processes.
- (E) Microfiche copiers.
- (viii) Battery charging operations.
- (ix) Pad printers.
- (m)** Lagoons, process water treatment equipment, wastewater treatment equipment, and sewage treatment equipment, except for any of the following:
  - (i) Lagoons and equipment primarily designed to treat volatile organic compounds in process water, wastewater, or groundwater, unless the emissions from the lagoons and equipment are only released into the general in-plant environment.
  - (ii) Sludge incinerators and dryers.
  - (iii) Heat treatment processes.
- (n)** Livestock and livestock handling systems from which the only potential air contaminant emission is odorous gas.
- (o)** Equipment for handling and drying grain on a farm.
- (p)** Commercial equipment used for grain unloading, handling, cleaning, storing, loading, or drying in a column dryer that has a column plate perforation of not more than 0.094 inch or a rack dryer in which exhaust gases pass through a screen filter no coarser than 50 mesh.
- (q)** Portable steam deicers that have a heat input of less than 1,000,000 Btu's per hour.
- (r)** Equipment used for any of the following metal treatment processes if the process emissions are only released into the general in-plant environment:
  - (i) Surface treatment.
  - (ii) Pickling.
  - (iii) Acid dripping.
  - (iv) Cleaning.
  - (v) Etching.
  - (vi) Electropolishing.
  - (vii) Electrolytic stripping or electrolytic plating.
- (s)** Emissions or airborne radioactive materials specifically authorized pursuant to a United States nuclear regulatory commission license.
- (t)** Equipment for the mining, loading, unloading, and screening of uncrushed sand, gravel, soil, and other inorganic soil-like materials.
- (u)** Solvent distillation and antifreeze reclamation equipment that has a rated batch capacity of not more than 55 gallons.

- (v) Any vapor vacuum extraction soil remediation process where vapor is treated in a control device and all of the vapor is reinjected into the soil such that there are no emissions to the atmosphere during normal operation.
- (w) Air strippers controlled by an appropriately designed and operated dual stage carbon adsorption or incineration system that is used exclusively for the cleanup of gasoline, fuel oil, natural gas condensate, and crude oil spills., provided the following conditions are met:
  - (a) For dual stage carbon adsorption, the first canister of the dual stage carbon adsorption is monitored for breakthrough at least once every 2 weeks and replaced if breakthrough is detected.
  - (b) For incineration, a thermal oxidizer (incinerator) is operated at a minimum temperature of 1,400 degrees Fahrenheit in the combustion chamber and a catalytic oxidizer is operated at a minimum temperature of 600 degrees Fahrenheit at the inlet of the catalyst bed. A temperature indication device which continually displays the operating temperature of the oxidizer must be installed, maintained, and operated in accordance with the manufacturer's specifications.
- (x) Any asbestos removal or stripping process or process equipment.
- (y) Ozonization process or process equipment.
- (z) Combustion of boiler cleaning solutions that were solely used for or intended for cleaning internal surfaces of boiler tubes and related steam and water cycle components if the solution burned is not designated, by listing or specified characteristic, as hazardous pursuant to federal regulations or state rules.
- (aa) Landfills and associated flares and leachate collection and handling equipment.
- (bb) A residential, municipal, commercial, or agricultural composting process or process equipment.
- (cc) Gun shooting ranges controlled by appropriately designed and operated high- efficiency particulate filters.
- (dd) Equipment for handling, conveying, cleaning, milling, mixing, cooking, drying, coating, and packaging grain-based food products and ingredients which meet any of the following:
  - (i) Equipment is used on a nonproduction basis.
  - (ii) Equipment has emissions that are released only into the general in-plant environment.
  - (iii) Equipment has externally vented emissions controlled by baghouse, cyclone, rotoclone, or scrubber which is 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. The air cleaning device shall be equipped with a device to monitor appropriate indicators of performance, for example, static pressure drop, water pressure, and water flow rate.
- (ee) Open burning as specified in R 336.1310.

- (ff) Fire extinguisher filling, testing, spraying, and repairing.
- (gg) Equipment used for chipping, flaking, or hogging wood or wood residues that are not demolition waste materials.
- (hh) A process that uses only hand-held aerosol spray cans, including the puncturing and disposing of the spray cans.
- (ii) Fuel cells that use phosphoric acid, molten carbonate, proton exchange membrane, or solid oxide or equivalent technologies.
- (jj) Any vacuum truck used at a remediation site as a remedial action method, such as non-emergency response, used in a manner described by any of the following:
  - (i) It is not used more than 2 days in a month without organic compound emission control.
  - (ii) It is not used more than 6 days in a month and organic compound emissions are controlled with at least 90% efficiency.
  - (iii) The composition of the material being removed is greater than 90% water.
- (kk) Air sparging systems where the sparged air is emitted back to the atmosphere only by natural diffusion through the contaminated medium and covering soil or other covering medium.
- (ll) Air separation or fractionation equipment used to produce nitrogen, oxygen, or other atmospheric gases.
- (mm) Routine and emergency venting of natural gas from transmission and distribution systems or field gas from gathering lines which meet any of the following:
  - (i) Routine or emergency venting of natural gas or field gas in amounts less than or equal to 1,000,000 standard cubic feet per event. For purposes of this rule, an emergency is considered an unforeseen event that disrupts normal operating conditions and poses a threat to human life, health, property or the environment if not controlled immediately.
  - (ii) Venting of natural gas in amounts greater than 1,000,000 standard cubic feet for routine maintenance or relocation of transmission and distribution systems provided that both of the following requirements are met:
    - (A) The owner or operator notifies the department prior to a scheduled pipeline venting.
    - (B) The venting includes, at a minimum, measures to assure safety of employees and the public, minimize impacts to the environment, and provide necessary notification in accordance with the Michigan gas safety standards, the federal pipeline and hazardous materials safety administration standards, and the federal energy regulatory commission standards, as applicable.
  - (iii) Venting of field gas in amounts greater than 1,000,000 standard cubic feet for routine maintenance or relocation of gathering pipelines provided that both of the following are met:
    - (A) The owner or operator notifies the department prior to a scheduled pipeline venting.

- (B) The venting includes, at a minimum, measures to assure safety of employees and the public, minimize impacts to the environment, and provide necessary notification in accordance with the Michigan department of environmental quality, office of oil, gas and minerals, and the Michigan public service commission standards, as applicable.
- (iv) Emergency venting of natural gas or field gas in amounts greater than 1,000,000 standard cubic feet per event, provided that the owner or operator notifies the pollution emergency alert system within 24 hours of an emergency pipeline venting. For purposes of this rule, an emergency is considered an unforeseen event that disrupts normal operating conditions and poses a threat to human life, health, property or the environment if not controlled immediately.
- (nn)** Craft distillery operations if all of the following are met:
- (i) Production of all spirits does not exceed 1,500 gallons per month, as produced.
  - (ii) Monthly production records are maintained on file for the most recent 5-year period and are made available to the department upon request.
- (oo)** Equipment or systems, or both, used exclusively to mitigate vapor intrusion of an indoor space that is not on the property where the release of the hazardous substance occurred, and which has an exhaust that meets all of the following requirements:
- (i) Unobstructed vertically upward.
  - (ii) At least 12 inches above the nearest eave of the roof or at least 12 inches above the surface of the roof at the point of penetration.
  - (iii) More than 10 feet above the ground.
  - (iv) More than 2 feet above or more than 10 feet away from windows, doors, other buildings, and other air intakes.
- (3)** For the purposes of this rule, “meaningful” with respect to toxic air contaminant emissions is defined as follows:
- (a)** “Meaningful change in the quality and nature” means a change in the toxic air contaminants emitted that results in an increase in the cancer or non-cancer hazard potential that is 10% or greater, or which causes an exceedance of a permit limit. The hazard potential is the value calculated for each toxic air contaminant involved in the proposed change, before and after the proposed change, and it is the potential to emit (hourly averaging time) divided by the initial risk screening level or the adjusted annual initial threshold screening level (ITSL), for each toxic air contaminant and screening level involved in the proposed change. The adjusted annual ITSL is the ITSL that has been adjusted as needed to an annual averaging time utilizing averaging time conversion factors in accordance with the models and procedures in 40 C.F.R §51.160(f) and Appendix W, adopted by reference in R 336.1902. The percent increase in the hazard potential is determined from the highest cancer and non-cancer hazard potential before and after the proposed change. The potential to emit before the proposed change is the baseline potential to emit established in an approved permit to install application on or after April 17, 1992, that has not been voided or revoked, unless it has been voided due to incorporation into a renewable operating permit.

- (b) “Meaningful increase in the quantity of the emission” means an increase in the potential to emit (hourly averaging time) of a toxic air contaminant that is 10% or greater compared to a baseline potential to emit, or which results in an increase in the cancer or non-cancer hazard potential that is 10% or greater, or which causes an exceedance of a permit limit. The baseline is the potential to emit established in an approved permit to install application on or after April 17, 1992 that has not been voided or revoked, unless it has been voided due to incorporation into a renewable operating permit.

History: 1979 AC; 1992 AACS; 1993 AACS; 1995 AACS; 1997 AACS; 2003 AACS; 2008 AACS; 2016 AACS; 2019 MR 1, Eff. Jan 2, 2019.

**Editor's Note:** An obvious error in R 336.1285 was corrected at the request of the promulgating agency, pursuant to Section 56 of 1969 PA 306, as amended by 2000 PA 262, MCL 24.256. The rule containing the error was published in Michigan Register, 2019 MR 1. The memorandum requesting the correction was published in Michigan Register, 2019 MR 1.

## **R 336.1286 Permit to install exemptions; plastic processing equipment.**

### **Rule 286.**

- (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 following:
- (a) Plastic extrusion, rotocasting, and pultrusion equipment and associated plastic resin handling, storage, and drying equipment.
  - (b) Plastic injection, compression, and transfer molding equipment and associated plastic resin handling, storage, and drying equipment.
  - (c) Plastic blow molding equipment and associated plastic resin handling, storage, and drying equipment if the blowing gas is 1 or more of the following gasses:
    - (i) Air.
    - (ii) Nitrogen.
    - (iii) Oxygen.
    - (iv) Carbon dioxide.
    - (v) Helium.
    - (vi) Neon.
    - (vii) Argon.
    - (viii) Krypton.
    - (ix) Xenon.
  - (d) Plastic thermoforming equipment.
  - (e) Reaction injection molding (open or closed mold) and slabstock/casting equipment.
  - (f) Plastic welding.

History: 1993 AACS; 1995 AACS; 1997 AACS; 2016 AACS.

## **R 336.1287 Permit to install exemptions; surface coating equipment.**

### **Rule 287.**

- (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 following:
  - (a)** An adhesive coating line which has an application rate of less than 2 gallons per day and which has emissions that are released only into the general in-plant environment.
  - (b)** A surface coating process that uses only hand-held aerosol spray cans, including the puncturing and disposing of the spray cans, or other coatings that are manually applied from containers not to exceed 8 ounces in size.
  - (c)** A surface coating line if all of the following conditions are met:
    - (i)** The coating use rate is not more than 200 gallons, as applied, minus water, per month.
    - (ii)** Any exhaust system that serves only coating spray equipment is supplied with a dry filter control or water wash control which is installed, maintained, and operated in accordance with the manufacturer's specifications, or the owner or operator develops a plan which provides to the extent practicable for the maintenance and operation of the equipment in a manner consistent with good air pollution control practices for minimizing emissions.
    - (iii)** Monthly coating use records are maintained on file for the most recent 2-year period and are made available to the department upon request.
  - (d)** A powder coating booth and associated ovens, where the booth is equipped with fabric filter control. The fabric filter control 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 a manner consistent with good air pollution control practices for minimizing emissions.
  - (e)** A silkscreen process.
  - (f)** Replacement of waterwash control in a paint spray booth with dry filter control.
  - (g)** Adding dry filters to paint spray booths.
  - (h)** Replacement of a coating applicator system with a coating applicator system that has an equivalent or higher design transfer efficiency, unless the change is specifically prohibited by a permit condition.
  - (i)** Equipment that is used for the application of a hot melt adhesive.
  - (j)** Portable equipment that is used for on-site nonproduction painting.
  - (k)** Mixing, blending, or metering operations associated with a surface coating line.

History: 1993 AACS; 1995 AACS; 1997 AACS; 2003 AACS; 2016 AACS.

## **R 336.1288 Permit to install exemptions; oil and gas processing equipment.**

### **Rule 288.**

- (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 following:
  - (a) Gas odorizing equipment.
  - (b) A glycol dehydrator that meets either of the following conditions:
    - (i) It is located at an oil well site and is controlled by a condenser or by other control equipment of equivalent or better efficiency than the condenser.
    - (ii) It is located at a site or facility that only processes natural gas from the Antrim zone.
  - (c) A sweet gas flare.
  - (d) Equipment for the separation or fractionation of sweet natural gas, but not including natural gas sweetening equipment.
  - (e) Equipment that is used for oil and gas well drilling, testing, completion, rework, and plugging activities.

History: 1993 AACS; 1995 AACS; 2008 AACS; 2016 AACS.

## **R 336.1289 Permit to install exemptions; asphalt and concrete production equipment.**

### **Rule 289.**

- (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 following:
  - (a) A cold feed aggregate bin for asphalt and concrete production equipment.
  - (b) A liquid asphalt storage tank that is controlled by an appropriately designed and operated vapor condensation and recovery system or an equivalent control system.
  - (c) An asphalt concrete storage silo that has all its emissions vented back into the burning zone of the kiln or that has an equivalent control system.
  - (d) A concrete batch plant that meets all of the following requirements:
    - (i) The plant shall produce not more than 200,000 cubic yards per year.
    - (ii) The plant shall use a fabric filter dust collector, a slurry mixer system, a drop chute, a mixer flap gate, or an enclosure for truck loading operations.
    - (iii) All cement handling operations, such as silo loading and cement weighing hoppers, shall either be enclosed by a building or equipped with a fabric filter dust control.

- (iv) The owner or operator shall keep monthly records of the cubic yards of concrete produced.
- (v) Before commencing operations, the owner or operator shall notify the appropriate district supervisor of the location where the concrete batch plant will be operating under this exemption.
- (vi) The concrete batch plant shall be located not less than 250 feet from any residential or commercial establishment or place of public assembly unless all of the cement handling operations, excluding the cement silo storage and loading operations, are enclosed within at least a 3-sided structure.
- (vii) The owner or operator shall implement the following fugitive dust plan:
  - (A) The drop distance at each transfer point shall be reduced to the minimum the equipment can achieve.
  - (B) On-site vehicles shall be loaded to prevent their contents from dropping, leaking, blowing, or otherwise escaping. This shall be accomplished by loading so that no part of the load shall come in contact within 6 inches of the top of any sideboard, side panel, or tailgate. Otherwise, the truck shall be tarped.
  - (C) All of the following provisions apply for site roadways and the plant yard:
    1. The dust on the site roadways and the plant yard shall be controlled by applications of water, calcium chloride, or other acceptable and approved fugitive dust control compounds. Applications of dust suppressants shall be done as often as necessary to meet an opacity limit of 5%.
    2. All paved roadways and plant yards shall be swept as needed between applications.
    3. Any material spillage on roads shall be cleaned up immediately.
    1. A record of all applications of dust suppressants and roadway and plant yard sweepings shall be kept for the most recent 5-year period and be made available to the department upon request.
  - (A) All of the following provisions apply for storage piles:
    1. Stockpiling of all nonmetallic minerals shall be performed to minimize drop distance and control potential dust problems.
    2. Stockpiles shall be watered on an as-needed basis in order to meet an opacity limit of 5%. Equipment to apply water or dust suppressant shall be available at the site or on call for use at the site within a given operating day.
    3. A record of all watering shall be kept on file for the most recent 5-year period and be made available to the department upon request.
  - (B) The provisions and procedures of this fugitive dust plan are subject to adjustment by written notification from the department if, following an inspection, the department determines the fugitive dust requirements or permitted opacity limits are not being met.

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

### **Rule 290.**

- (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 CO<sub>2</sub> 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.
- (a) A description of the emission unit is maintained throughout the life of the unit.
- (b) 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.
- (c) The records are maintained on file for the most recent 2-year period and are made available to the department upon request.

History: 1993 AACS; 1995 AACS; 1997 AACS; 2016 AACS.

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

### **Rule 291.**

- (1) This rule does not apply if prohibited by R 336.1278 and unless the requirements of R 336.1278a have been met.
  - (a) 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 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.
  - (b) 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.
  - (c) 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.
  - (d) 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.
  - (e) The emission unit has no potential emissions of asbestos and/or subtilisin proteolytic enzymes.
  - (f) A description of the emission unit shall be maintained throughout the life of the unit.
  - (g) 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. Such documentation shall include the toxic air contaminant screening level applicable at the time of installation and/or modification of the emission unit.

(2) Table 23. Potential Emissions from Air Contaminants

Air Contaminant	Potential Emissions Not to be Exceeded
CO <sub>2</sub> equivalent	75,000 tons per year
CO	10 tons per year
NO <sub>x</sub>	10 tons per year
SO <sub>2</sub>	10 tons per year
VOC (as defined in R 336.1122)	5 tons per year
PM	10 tons per year
PM-10	5 tons per year
PM-2.5	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

History: 2016 AACS.

**R 336.1299 Rescinded.**

History: 1992 AACS; 1995 AACS; 1998-2000 AACS; 2001 AACS; 2003 AACS; 2008 AACS; 2012 AACS; 2016 MR 24, Eff. Dec. 20, 2016.