

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

AIR QUALITY DIVISION

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

R 336.1628 Emission of volatile organic compounds from components of existing process equipment used in manufacturing synthetic organic chemicals and polymers; monitoring program.

Rule 628. (1) A person shall not cause or allow the emission of a volatile organic compound from a component of existing manufacturing process equipment at a synthetic organic chemical and polymer manufacturing plant located in any of the following counties, unless all of the provisions of subrules (2) to (16) of this rule are met or unless an equivalent control method, as approved by the department, including the control method described in 40 C.F.R., subpart VV, §§60.480 to 60.489 (2000), standards of performance for equipment leaks of volatile organic compound in the synthetic organic chemicals manufacturing industry, is implemented:

- (a) Kent.
- (b) Livingston.
- (c) Macomb.
- (d) Monroe.
- (e) Muskegon.
- (f) Oakland.
- (g) Ottawa.
- (h) St. Clair.
- (i) Washtenaw.
- (j) Wayne.

The provisions of 40 C.F.R., part 60, subpart VV, §§60.480 to 60.489 (2000), are adopted by reference in these rules and are available for inspection and purchase at the Department of Environmental Quality, Air Quality Division, P.O. Box 30260, Lansing, Michigan 48909-7760, at cost. Copies may be obtained from the Superintendent of Documents, Government Printing Office, P.O. Box 371954, Pittsburgh, Pennsylvania 15250-7954, at a cost as of the time of adoption of these rules of \$66.00, or on the United States government printing office internet web site at <http://www.access.gpo.gov>.

(2) A person shall not operate existing manufacturing process equipment at a synthetic organic chemical and polymer manufacturing plant unless a monitoring program is implemented. The monitoring program shall provide for all of the following:

(a) A quarterly inspection of all components in light liquid or gaseous volatile organic compound service that are not designated as difficult-to-monitor components.

(b) An annual inspection of all difficult-to-monitor components in light liquid or gaseous volatile organic compound service. Annual inspections shall take place during the period of April 1 through June 30.

(c) A weekly visual inspection of all seals of pumps in light liquid service.

(d) An immediate inspection of all components from which a liquid, which includes a volatile organic compound, is observed dripping or from which a gaseous volatile organic

compound is observed venting to the atmosphere.

(e) Within 2 normal business days of its venting to the atmosphere, an inspection of each relief valve from which a volatile organic compound could discharge.

(f) An inspection, as soon as is practical, but not later than 5 calendar days, after the repair of a component that was found leaking.

(3) Except for the visual inspections required by the provisions of subrule (2)(c) of this rule, all inspections shall be performed using equipment and procedures as specified in federal reference test method 21 as described and adopted by reference in R 336.2004. A component is leaking when a concentration of more than 10,000 ppm, by volume, as methane or hexane, is measured by method 21.

(4) If implementation of the quarterly leak detection program as specified in subrule (2)(a) of this rule shows that 2% or less of the process valves in a given process unit are leaking for 2 consecutive quarters, then the inspections of process valves in that unit are not required for 1 quarter. If 2% or less of the process valves in a given process unit are leaking for 5 consecutive quarters, then the inspections may be performed annually. If a subsequent inspection shows that more than 2% of the process valves are leaking, then quarterly inspections of valves shall again be required.

(5) The percentage of valves leaking on a process unit, as referenced in subrule (4) of this rule, shall be determined by dividing the total number of valves found to be leaking on the process unit during the specified monitoring period by the total number of valves on the process unit that are required to be monitored by this rule.

(6) The provisions of subrule (2) of this rule do not apply to either of the following:

(a) A component that is equipped with a closed vent system which is capable of capturing and transporting a leakage from the component to a control device that is designed and operated to reduce the volatile organic compound emissions vented to it by 95% or more.

(b) An unsafe-to-monitor component, until conditions would no longer expose monitoring personnel to immediate danger.

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

(a) A component that contains or contacts a gaseous stream with a volatile organic compound concentration of less than 10% by weight. Procedures that conform to the general methods in ASTM standards E260, E168, and E169 shall be used to determine the percentage of volatile organic compound contents in the process fluid that is contained in or contacts a piece of equipment. The provisions of ASTM standards E260, E168, and E169 are adopted by reference in these rules. Copies of the standards may be inspected at the Lansing office of the air quality division of the department of Environmental Quality. Copies of the standards may be obtained from the American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, Pennsylvania 19428, or from the Department of Environmental Quality, Air Quality Division, P.O. Box 30260, Lansing, Michigan 48909-7760, at a cost as of the time of adoption of these rules of \$35.00 each for E260 and E168 and \$30.00 for E169.

(b) A component that operates under a vacuum.

(c) Components of synthetic organic chemical and polymer manufacturing process units that produce 1,100 tons per calendar year or less of light liquid or gaseous volatile organic compounds.

(d) A relief valve that has an upstream rupture disc.

(8) A person shall seal open-ended lines with a second valve, a blind flange, a cap, or a plug, except when the open end is in use, as with relief valves, double block and bleed valves, and

composite samplers. In the case of a second valve, the upstream valve shall be closed first after each use.

(9) A component that is found to be leaking pursuant to the monitoring program provisions of subrule (2) of this rule or for another reason shall be repaired. Except as provided in subrule (11) of this rule, the leak shall be repaired as soon as possible, but not more than 15 days after the leak is detected. Until such time as the leak is repaired and retested verifying a successful repair, the component that is causing the leak shall bear a weather-resistant, numbered identifying tag that indicates the date the leak was discovered.

(10) A log of all leaks that are detected under subrule (2) of this rule shall be maintained by the person who operates the synthetic organic chemical and polymer manufacturing plant. The log shall list all of the following information:

(a) The leaking component and synthetic organic chemical and polymer manufacturing process unit.

(b) The number of the identifying tag.

(c) The date the leak was discovered.

(d) The date the leak was repaired.

(e) The date the component was retested after the repair, with an indication of the testing results.

(f) The person or persons who performed the inspections.

(11) All of the following provisions apply to delays in the repair of leaking components:

(a) If a leak cannot be repaired within 15 calendar days because the leaking component cannot be repaired unless the synthetic organic chemical and polymer manufacturing process unit is shut down, then the person who operates the synthetic organic chemical and polymer manufacturing plant shall maintain a log of the nonrepair and the leak shall be repaired at the next unit turnaround.

(b) If a leak cannot be repaired within 15 calendar days due to circumstances beyond the control of the person who operates the synthetic organic chemical and polymer manufacturing plant, then the person shall notify the department of the circumstances causing the delay in repair before the end of the fifteenth day and shall maintain a log of the nonrepair. The leak shall be repaired in an expeditious manner, which shall be within 6 months of the date the leak was detected.

(c) The log specified in subdivisions (a) and (b) of this subrule shall list all of the following information:

(i) The leaking component and synthetic organic chemical and polymer manufacturing process unit.

(ii) The date on which the leak was discovered.

(iii) The reason why the leak cannot be repaired within 15 days.

(iv) The estimated date of repair.

(v) The number of the identifying tag.

(12) A log of all unsafe-to-monitor components that are not part of the written program as required by subrule (14) of this rule shall be maintained by the person who operates the synthetic organic chemical and polymer manufacturing plant. This log shall list all of the following information:

(a) The unsafe-to-monitor component and synthetic organic chemical and polymer manufacturing process unit.

(b) The number of the identifying tag.

(c) The reason why the component was unsafe to monitor.

(d) The date, or dates, on which the component was unsafe to monitor.

(13) Not later than 25 calendar days after the end of the previous quarter, the person who operates the synthetic organic chemical and polymer manufacturing plant shall submit, to the department, a report that contains all of the following information for that quarter:

(a) The total number of components tested, by type.

(b) The total number of components which are found leaking and which are repaired, by type.

(c) The total number of components, by synthetic organic chemical and polymer manufacturing process unit and type, which are found to be leaking and which are not repaired within the required time period and the reason for nonrepair.

(d) The type or types of monitoring equipment utilized during the quarter.

(e) The total number of unsafe-to-monitor components that are logged as required by the provisions of subrule (12) of this rule.

The report required by this subrule shall be made on a form that is provided by the department.

(14) A person who is subject to the provisions of this rule shall comply with both of the following provisions:

(a) Develop a written program detailing how the provisions of this rule will be implemented. The program shall include listings, by type and synthetic organic chemical and polymer manufacturing process unit, of all of the following:

(i) All components that are regularly inspected as required in subrule (2) of this rule.

(ii) All components that are equipped with a closed vent system subject to the provisions of subrule (6)(a) of this rule.

(iii) All components that are exempted from the provisions of this rule pursuant to the provisions of subrule (7)(b), (c), and (d) of this rule.

(iv) All difficult-to-monitor components in light liquid or gaseous volatile organic compound service.

(v) All components which are located outside a building, which can only be monitored by elevating the monitoring personnel more than 6 feet above ground level, and which are unsafe to monitor during the period of November 1 through March 31.

(b) Except as noted in subrule (16) of this rule, begin inspections as required in subrule (2) of this rule not later than 6 months after the effective date of this rule.

(15) The written program required by the provisions of subrule (14) of this rule and the logs required by the provisions of subrules (10), (11), and (12) of this rule shall be made available, to any representative of the department, on Monday through Friday between 9 a.m. and 5 p.m., at the synthetic organic chemical and polymer manufacturing plant. The logs shall be kept for a minimum of 2 years.

(16) If a synthetic organic chemical and polymer manufacturing process unit that was previously exempt pursuant to the provisions of subrule (7)(c) of this rule produces light liquid or gaseous volatile organic compounds in excess of 1,100 tons in a calendar year, then the provisions of this rule shall apply. Inspections shall begin not later than 6 months after the end of that calendar year and be maintained thereafter.

History: 1989 MR 4, Eff. Apr. 19, 1989; 1993 MR 11, Eff. Nov. 18, 1993; 1997 MR 5, Eff. June 15, 1997; 2002 MR 5, Eff. Mar. 19, 2002.