

DEPARTMENT OF ENVIRONMENTAL QUALITY

AIR QUALITY DIVISION

PART 10. INTERMITTENT TESTING AND SAMPLING

R 336.2004 Appendix A; reference test methods; adoption of federal reference test methods.

Rule 1004. (1) The following federal reference test methods, described in the provisions of 40 C.F.R. part 60, appendix A (2005), are the reference test methods for performance tests required pursuant to the provisions of this part:

- (a) Method 1 - Sample and velocity traverse for stationary sources.
- (b) Method 1A - Sample and velocity traverses for stationary sources with small stacks or ducts.
- (c) Method 2 - Determination of stack gas velocity and volumetric flow rate (type-S pitot tube).
- (d) Method 2A - Direct measurement of gas volume through pipes and small ducts.
- (e) Method 2C - Determination of stack gas velocity and volumetric flow rate in small stacks and ducts (standard pitot tube).
- (f) Method 2D - Measurement of gas volumetric flow rates in small pipes and ducts.
- (g) Method 3 - Gas analysis for the determination of dry molecular weight.
- (h) Method 4 - Determination of moisture content in stack gases.
- (i) Method 6 - Determination of sulfur dioxide emissions from stationary sources.
- (j) Method 7 - Determination of nitrogen oxide emissions from stationary sources.
- (k) Method 8 - Determination of sulfuric acid mist and sulfur dioxide emissions from stationary sources.
- (l) Method 9 - Visual determination of the opacity of emissions from stationary sources.
- (m) Method 10 - Determination of carbon monoxide emissions from stationary sources.
- (n) Method 10B - Determination of carbon monoxide emissions from stationary sources.
- (o) Method 18 - Measurement of gaseous organic compound emissions by gas chromatography.
- (p) Method 21 - Determination of volatile organic compound leaks.
- (q) Method 24 - Determination of volatile matter content, water content, density, volume solids and weight solids of surface coatings.
- (r) Method 24A - Determination of volatile matter content and density of printing inks and related coatings.
- (s) Method 25 - Determination of total gaseous nonmethane organic emissions as carbon.
- (t) Method 25A - Determination of total gaseous organic concentration using a flame ionization analyzer.
- (u) Method 27 - Determination of vapor tightness of gasoline delivery tank using pressure-vacuum test.

(2) The reference test methods listed in subrule (1) of this rule are adopted by reference in this rule. Copies of the test methods may be inspected at the Lansing office of the air quality division of the department of environmental quality. A copy of title 40 of the Code of Federal Regulations, part 60, appendix A, may be obtained from the Department of Environmental Quality, Air Quality Division, P.O. Box 30260, Lansing, Michigan 48909-7760; from the Superintendent of Documents, United States Government Printing Office, P.O. Box 371954, Pittsburgh, Pennsylvania 15250-7954, at a cost at the time of adoption of these rules of \$57.00; or on the United States government printing office internet web site at <http://www.access.gpo.gov>.

(3) All alternatives that are subject to the approval of the administrator in the adopted federal reference methods are subject to the approval of the department.

(4) Determinations of compliance with visible emission standards for stationary sources shall be conducted as specified in reference test method 9 or other alternative method approved by the

department, with the following exceptions:

(a) Visible emissions from a scarfing operation at a steel manufacturing facility shall be determined as specified in reference test method 9A, which is described in R 336.2030.

(b) Visible emissions from a coke oven pushing operation and fugitive coke oven visible emissions shall be determined as specified in reference test method 9B, which is described in R 336.2031.

(c) Visible emissions, fugitive and nonfugitive, from basic oxygen furnace operations, hot metal transfer operations, and hot metal desulfurization operations shall be determined as specified in reference method 9C, which is described in R 336.2032.

(5) Determinations of particulate emission rates for stationary sources shall be conducted as specified in 1 or more of the following reference test methods:

(a) Reference test method 5B, which is described in R 336.2011.

(b) Reference test method 5C, which is described in R 336.2012.

(c) Reference test method 5D, which is described in R 336.2013.

(d) Reference test method 5E, which is described in R 336.2014.

(e) "Standard Methods for the Examination of Water and Wastewater," (14th edition), section 208C, as described and modified in R 336.2033.

(6) Determinations of total gaseous nonmethane organic emissions as carbon, using the alternate version of federal reference test method 25 incorporating the Byron analysis, shall be conducted as specified in R 336.2006.

History: 1979 ACS 1, Eff. Jan. 19, 1980; 1985 MR 2, Eff. Feb. 22, 1985; 1989 MR 4, Eff. Apr. 19, 1989; 1993 MR 4, Eff. Apr. 28, 1993; 2002 MR 5, Eff. Mar. 19, 2002; 2006 MR 4, Eff. Feb. 22, 2006.