# METROPOLITAN HEALTH DEPARTMENT POLLUTION CONTROL DIVISION

# REGULATION NO. 6 EMISSION MONITORING OF STATIONARY SOURCES

As provided for in Section 10.56, "Air Pollution Control" of the Metropolitan Code of Laws of Nashville and Davidson County, Tennessee.

Adopted 23, 1977
As Amended December 7, 1977
By the Metropolitan Board of Health
Nashville and Davidson County, Tennessee

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## REGULATION NO. 6 EMISSION MONITORING OF STATIONARY SOURCES

This regulation sets forth the minimum requirements for continuous emission monitoring, recording and reporting for stationary sources in Metropolitan Nashville and Davidson County. This Regulation is promulgated as provided for in Section 10.56.090, "Board - Powers and Duties," Chapter 10.56, "Air Pollution Control," of the Metropolitan Code of Laws.

The Director may require the owner or operator of any air contaminant source discharging air contaminants to install and maintain such monitoring equipment as the Director shall prescribe; establish and maintain such records; and make periodic emission reports.

#### **SECTION 6-1: Definitions**

As used in this Regulation, all terms not defined herein shall have the meaning given them in Chapter 10.56, "Air Pollution Control" Section 10.56.010, "Definitions," of the Metropolitan Code of Laws.

- (a) "Capacity factor" means the ratio of the average load on a machine or equipment for the period of time considered to the capacity rating of the machine or equipment.
- (b) **"Emission standard"** means a regulation (or portion thereof) setting forth an allowable rate of emissions, level of opacity, or prescribing equipment or fuel specifications that result in control of air pollution emissions.
- (c) **"Excess emissions"** means emission of an air pollutant in excess of an emission standard.
- (d) **"Fossil fuel-fired steam generator"** means a furnace or boiler used in the process of burning fossil fuel for the primary purpose of producing steam by heat transfer.
- (e) "Incinerator" means any furnace used in the process of burning solid waste for the purpose of reducing the volume of the waste by removing combustible material.

### **SECTION 6-2: Monitoring Emissions**

The source categories listed below are required to complete the installation and performance testing of the representative equipment and begin maintenance recording on or before April 1, 1978.

(a) Each fossil fuel-fired steam generator or each steam generating facility where the effluent for more than one fossil fuel-fired steam generator is combined and released to the atmosphere through a common stack, except as provided in the following items, with an annual average capacity factor greater than 30% as reported to the Federal Power Commission for the calendar year 1974, or as otherwise demonstrated to the Director by the owner or operator, shall conform with the following monitoring requirements:

- (1) A continuous monitoring system for measuring opacity shall be installed, calibrated, maintained, and operated by the owner or operator of any said steam generating facility greater than 250 million BTU per hour heat input, total plant heat input to one or more stacks, except where:
  - (i) Gaseous fuel is the only fuel burned: or
  - (ii) Oil or a mixture of gas and oil are the only fuels burned and the source is able to comply with the applicable particulate matter and opacity standards without utilization of particulate matter collection equipment, and where the source has never been found through any administrative or judicial proceedings to be in violation of any visible emission standard.
- (2) A continuous monitoring system for the measurement of sulfur dioxide shall be installed, calibrated, maintained, and operated, on any fossil fuel-fired steam generated which has installed sulfur dioxide pollution control equipment or where the burning of a combination of gas, oil, or solid fuel is used to meet the applicable sulfur dioxide emission standards.
- (3) A continuous monitoring system for the measurement of the percent oxygen or carbon dioxide shall be installed, calibrated, maintained, and operated when fossil fuel-fired steam generators where measurement of oxygen or carbon dioxide in the flue gas are required to convert sulfur dioxide continuous emission monitoring data to units of the emission standard.
- (b) Each incinerator of more than 50 tons per day charging rate shall install, calibrate, maintain, and operate a continuous monitoring system for the measurement of opacity.

### **SECTION 6-3: Equipment Specifications**

All monitoring equipment specified under Section 6-2 shall meet the performance specifications set forth in 40 CFR, Part 60, Appendix B, 40 Fed. Reg. 46250 (October 6, 1975). The monitoring equipment shall also be installed, calibrated, maintained, and operated in accordance with the procedures outlined in 40 CFR, Part 51, Appendix P, 40 Red. Reg. 46240 (October 6, 1975).

### **SECTION 6-4: Monitoring System Malfunction**

Due allowance for failure to monitor shall be made during any period of monitoring system malfunction, provided that the source owner or operator demonstrate to the satisfaction of the Director that the malfunction was unavoidable and is being repaired as expeditiously as practical, and that a log of all such malfunctions is being maintained by the owner or operator, including the time the malfunction began, when it was detected, reason for the malfunction, what was done to correct the malfunction, and when the malfunction was corrected.

### **SECTION 6-5: Recording and reporting**

Owners or operators of sources subject to Section 6-2 are required to submit a written report of excess emissions for each calendar quarter and the nature and cause of the excess emissions. The averaging period used for data reporting shall correspond to the averaging period specified in the emission standard. This report must include at a minimum:

- (a) For opacity measurements, the summary shall consist of the magnitude and actual percent opacity of all one-minute averages of opacity greater than 20 percent. Average values may be obtained by integrating over the averaging period or by arithmetically averaging the minimum of four equally spaced instantaneous opacity measurements per minute.
- (b) For gaseous measurements, the summary shall consist of emission averages, in the units of the applicable standard, per each averaging period during which the applicable standard was exceeded. For sources burning a combination of gases or sold fuel to meet the applicable sulfur dioxide emission standards, emission records along with a record of fuel consumption and fuel analysis shall be submitted monthly. The fuel analysis shall be conducted in accordance with the provisions of Chapter 10.56, "Air Pollution Control," Section 10.56.300, "Testing Procedures," of the Metropolitan Code of Laws.
- (c) The date and time identifying each period during which the continuous monitoring system was inoperative, except for zero span checks, and the nature of system repairs or adjustments shall be reported. The Director may require proof of continuous monitoring system performance whenever systems, repairs, or adjustments have been made.
- (d) When no excessive emissions have occurred and a continuous monitoring system has not been inoperative, repaired, or adjusted, such information shall be included in the report.
- (e) The owner or operator of affected facilities shall maintain a file of all information reported in the quarterly summaries, and all other data collected either by the continuous monitoring system or as necessary to convert monitoring data to the units of the applicable standard for a minimum of two years from the date of collection of such data or submission of such summaries.

#### **SECTION 6-6: Data Reduction**

Owner or operators of facilities subject to Section 6-2 are required to use procedures outlined in 40 CFR, Part 51, Appendix P, 40 Fed. Reg. 46240, (October 6, 1975), for converting monitoring data to units of the standard where necessary.