

WEST VIRGINIA ADMINISTRATIVE REGULATIONS

Subject: Regulation IX - Ambient Air Quality Standards for
Carbon Monoxide, Non-Methane Hydrocarbons, and Ozone.

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ABSTRACT

The amendments to Regulation IX (1971) were adopted by the Commission on the 22nd day of April, 1980. Regulation IX (1971), as amended, was retitled Regulation IX (1980) and became effective October 22, 1980, and was filed with the Secretary of State June 27, 1980, and superseded Regulation IX (1971). Regulation IX (1971) was adopted by the West Virginia Air Pollution Control Commission on the 24th day of June, 1971 and became effective September 1, 1971, and was filed with the Secretary of State July 15, 1971.

Title 45
Legislative Rule

~~WEST VIRGINIA ADMINISTRATIVE REGULATIONS~~
Air Pollution Control Commission

~~Chapter 16-20~~
Series ~~IX-9~~
(1980)

Subject: ~~Regulation IX~~ - Ambient Air Quality Standards for Carbon Monoxide, Non-Methane Hydrocarbons, and Ozone

Section 9. General.

0.01. Scope.

The purpose of ~~Regulation IX~~ ^{Series 9} is to establish ambient air quality standards for Carbon Monoxide, Non-Methane Hydrocarbons, and Ozone.

0.02. Authority. *W.Va. Code § 16-20-5*

This regulation is issued under the authority of the West Virginia Code, Chapter 16, Article 20, Section 5. This regulation relates to West Virginia Code, Chapter 16, Article 20, Sections 1 through 13 inclusive.

0.03. Filing Date.

This regulation was promulgated or last amended on the 22nd day of April, 1980, was filed with the office of the Secretary of State the 27th day of June, 1980. Further, this regulation was filed pursuant to West Virginia Code, Chapter 29A, Article 2, Section 5 on the 30th day of December, 1982 in the office of the Secretary of State.

0.04. Effective Date.

The effective date of this regulation is the 22nd day of October, 1980.

0.05. Type.

This regulation is a legislative rule as defined in West Virginia Code, Chapter 29A, Article 2.

Section ^{e2} 1. Anti-Degradation Policy.

1.01. In the best interests of the State of West Virginia, it is the objective of the Commission to obtain and maintain the cleanest air possible, consistent with the best available technology.

2.2 Where the present ambient air is of better quality than the established standards, the Commission will develop long-range plans to protect the difference between the present quality and the established standards. The plans will be based upon the best available forecasts of probable land and air uses in such areas of high air quality.

2.3 The air quality of these areas will not be lowered unless it has been clearly demonstrated to the Commission that such a change is justifiable as a result of necessary economic or social development and will not result in "Statutory Air Pollution". This will require that any industrial, public, or private project or development which could constitute a new source of air pollutants, within an area of such high air quality, provide the best practicable control available under existing technology as part of the initial project.

Section 2. ³ Definitions.

- 2.01. "Air Pollutants" shall mean solids, liquids, or gases which, if discharged into the air, may result in a statutory air pollution.
- 2.02. "Air Pollution", 'statutory air pollution', shall have the meaning ascribed to it in Section Two of Chapter Sixteen, Article Twenty of the Code of West Virginia, as amended.
- 2.03. "Commission" shall mean the West Virginia Air Pollution Control Commission.
- 2.04. "Person" shall mean any and all persons, natural or artificial, including the State of West Virginia or any other state, the United States of America, any municipal, statutory, public or private corporation organized or existing under the laws of this or any other state or country, and any firm, partnership or association of whatever nature.
- 2.05. "Hydrocarbons" shall mean compounds whose molecules consist of atoms of hydrogen and carbon and exist in the atmosphere in the gas phase. Specifically excluded are hydrocarbons and other organics associated only with suspended particles in the atmosphere. For purposes of these air quality standards non-methane hydrocarbons shall be taken to be the difference between the reported total hydrocarbons and methane values obtained from an air sample.

- 2.06. "Ozone" shall mean the triatomic oxygen molecule (O_3), a very reactive form of oxygen.
- 2.07. "Standard Conditions" shall mean for the purposes of this regulation a temperature of $25^{\circ}C$ and a pressure of 760 mm of mercury column.
- 2.08. "Ambient Air Quality Standards" shall mean the numerical expression of a specified concentration level for a particular air pollutant in the ambient air and the time averaging interval over which that concentration level is measured.

Section 24 Ambient Air Quality Standards.

3.01. The following air pollutant concentrations shall not be exceeded:

(a) Carbon Monoxide

Maximum Eight (8) Hour Concentration, 10 milligrams per cubic meter (9 ppm) - not to be exceeded more than once per year.

Maximum One (1) Hour Concentration, 40 milligrams per cubic meter (35 ppm) - not to be exceeded more than once per year.

(b) Ozone

Maximum One (1) Hour Concentration (Highest single value per day), 235 micrograms per cubic meter (0.12 ppm). Violation of this standard shall occur when the average number of expected exceedances is greater than one per year based on three years data. (Reference 1).

(c) Hydrocarbons (Measured and Corrected for Methane)

Maximum Three (3) Hour Concentration, 160 micrograms per cubic meter (0.24 ppm) for the time period of 6:00 a.m. to 9:00 a.m. - not to be exceeded more than once per year.

The hydrocarbon standard is to be used as a guide in devising implementation plans to achieve ozone standards.

Section 4.5 Methods of Measurement.

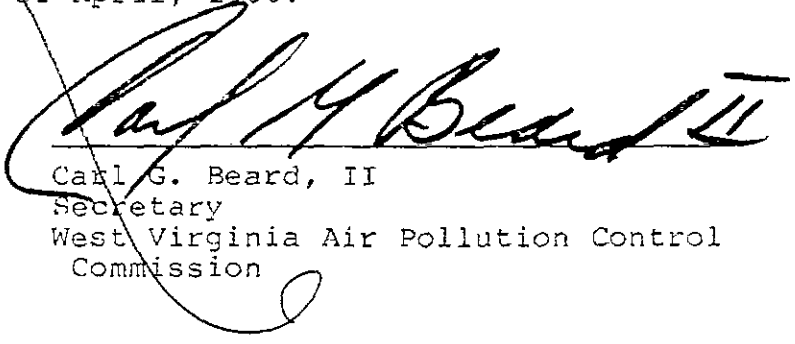
- 4.01. Carbon Monoxide concentrations shall be determined by nondispersive infrared (NDIR) methods or by such other methods approved as equally or more specific, accurate, sensitive, and reproducible by the West Virginia Air Pollution Control Commission.
- 4.02. Ozone concentrations shall be determined by the chemiluminescence reaction of ozone with ethylene and calibrated by the UV photometric procedure (Reference 2), or by the boric acid potassium iodide (BAKI) method which may be used as the calibration procedure in place of the UV photometric method until August, 1980, or by such other detection and/or calibration methods approved as equally or more specific, accurate, sensitive, and reproducible by the West Virginia Air Pollution Control Commission.
- 4.03. Hydrocarbon concentrations shall be determined by subtraction of methane concentrations from total hydrocarbons concentrations determined by the flame ionization technique or by such other methods approved as equally or more specific, accurate, sensitive, and reproducible by the West Virginia Air Pollution Control Commission.
- 4.04. Other less specific methods of measurement may be used provided an accurate method of conversion can be developed to express the results in terms of equivalence

to those that would be expected using the above methods or other more specific, accurate, sensitive, and reproducible methods approved by the West Virginia Air Pollution Control Commission.

Section 5. Effective Date.

Regulation IX shall become effective October 22, 1980.

The foregoing is a true and correct copy of the West Virginia Air Pollution Control Commission Regulation IX adopted on the 22nd day of April, 1980.



Carl G. Beard, II
Secretary
West Virginia Air Pollution Control
Commission

¹ Federal Register, "Appendix H - Interpretation of the National Ambient Air Quality Standards for Ozone", Vol. 44, No. 28 - Thursday, February 8, 1979, p. 8220, 8221.

² Federal Register, "Appendix D - Measurement Principle and Calibration Procedure for the Measurement of Ozone in the Atmosphere", Vol. 44, No. 28 - Thursday, February 8, 1979, p. 8224 - 8233.