

3745-25-02 **Ambient air quality standards.**

[Comment: For dates of non-regulatory government publications, publications of recognized organizations and associations, federal rules, and federal statutory provisions referenced in this rule, see paragraph (B) of rule 3745-25-01 of the Administrative Code titled "Referenced materials."]

Primary ambient air quality standards define levels of air quality which are necessary, with an adequate margin of safety, to protect the public health. Secondary ambient air quality standards define levels of air quality which are necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

(A) Particulate matter:

- (1) For the purpose of determining attainment of the primary and secondary ambient air quality standards for particulate matter applicable throughout the state of Ohio, particulates shall be measured in the ambient air as both particles with an aerodynamic diameter less than or equal to a nominal ten micrometers (PM10) and particles with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers (PM2.5).
- (2) The level of the primary and secondary twenty-four-hour ambient air quality standards for PM10 is one hundred fifty micrograms per cubic meter, twenty-four-hour average concentration. The standards are attained when the expected number of days per calendar year with a twenty-four-hour average concentration above one hundred fifty micrograms per cubic meter, as determined in accordance with 40 CFR Part 50, Appendix K , is equal to or less than one.
- (3) The level of the primary and secondary twenty-four-hour standards for PM2.5 is thirty-five micrograms per cubic meter, twenty-four-hour average concentration. The standards are attained when the ninety-eighth percentile twenty-four-hour average concentration, as determined in accordance with 40 CFR Part 50, Appendix N, is less than or equal to thirty-five micrograms per cubic meter.
- (4) The level of the primary and secondary annual standards for PM2.5 is fifteen micrograms per cubic meter, annual average concentration. The standards are attained when the three-year average concentration as determined in accordance with 40 CFR Part 50, Appendix N, is less than or equal to fifteen micrograms per cubic meter.

(B) Sulfur dioxide:

- (1) The primary ambient air quality standards for sulfur dioxide applicable throughout the state of Ohio shall be as follows:

- (a) The maximum annual arithmetic mean concentration shall not exceed eighty micrograms per cubic meter (0.03 parts per million by volume).
 - (b) The maximum twenty-four-hour concentration not to be exceeded more than once per year shall be three hundred sixty-five micrograms per cubic meter (0.14 parts per million by volume).
- (2) The secondary ambient air quality standard for sulfur dioxide applicable throughout the state of Ohio shall be a maximum three-hour concentration not to be exceeded more than once per year of thirteen hundred micrograms per cubic meter (0.50 parts per million by volume).
- (3) For purposes of ascertaining, defining and measuring ambient air quality, concentrations of sulfur dioxide shall be determined either through twenty-four-hour intermittent sampling utilizing the "Reference Method" in accordance with in 40 CFR Part 50, Appendix A or through the use of a continuous sampling and recording device which has been designated an "Equivalent Method" in accordance with 40 CFR Part 53.

(C) Carbon monoxide:

Ambient air quality standards for carbon monoxide, applicable throughout the state of Ohio, shall be as follows:

- (1) The maximum eight hour arithmetic mean concentration not to be exceeded more than once per year shall be nine parts per million by volume.
- (2) The maximum one hour arithmetic mean concentration not to be exceeded more than once per year shall be thirty-five parts per million by volume.

(D) Ozone:

The ambient air quality standard for ozone applicable throughout the state of Ohio, shall be the three year average of the annual fourth-highest daily maximum eight-hour arithmetic mean concentration, not to exceed 0.08 parts per million by volume. The three year average of the fourth high concentrations shall be determined in accordance with the procedures in 40 CFR Part 50, Appendix I.

(E) Nitrogen dioxide:

The ambient air quality standard for nitrogen dioxide applicable throughout the state of Ohio shall be as follows: The maximum annual arithmetic mean concentration shall not exceed 0.053 parts per million (one hundred (100) micrograms per cubic meter).

(F) Lead:

- (1) The ambient air quality standards for lead, applicable throughout the state of Ohio, shall be a maximum arithmetic mean of 1.5 micrograms per cubic meter during any calendar quarter.
- (2) For purposes of paragraph (F)(1) of this rule, the four calendar quarters are as follows: first quarter - January, February, March; second quarter - April, May, June; third quarter - July, August, September; and fourth quarter - October, November, December.

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