

NEBRASKA ADMINISTRATIVE CODE

Title 129 - Department of Environmental Quality

Chapter 4 - AMBIENT AIR QUALITY STANDARDS

The following ambient air quality standards are applicable in the State of Nebraska:

001 Particulate Matter

001.01 PM₁₀ – Primary and secondary standards

Level: 150 micrograms per cubic meter

Averaging time: 24-hours

Form: Not to be exceeded more than once per year on average over 3 years

(Attainment of these standards is determined in accordance with Appendix K of 40 CFR Part 50 (version July 1, 2013); which is adopted and incorporated herein)

001.02 PM_{2.5}

001.02A Primary standard

Level: 12.0 micrograms per cubic meter

Averaging time: Annual

Form: Annual mean averaged over 3 years

001.02B Secondary standard

Level: 15.0 micrograms per cubic meter

Averaging time: Annual

Form: Annual mean averaged over 3 years

001.02C Primary and secondary standard

Level: 35 micrograms per cubic meter

Averaging time: 24-hour

Form: 98th percentile averaged over 3 years

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(Attainment of these standards is determined in accordance with Appendix N of 40 CFR Part 50 (version July 1, 2013); which is adopted and incorporated herein)

002 Sulfur dioxide

002.01 Primary standard

Level: 75 parts per billion
Averaging time: 1-hour
Form: 99th percentile of 1-hour daily maximum concentrations averaged over 3 years

002.02 Secondary standard

Level: 0.5 parts per million
Averaging time: 3-hours
Form: Not to be exceeded more than once a year

(Attainment of this standard is determined in accordance with Appendix T of 40 CFR Part 50 (version July 1, 2013); which is adopted and incorporated herein)

003 Nitrogen dioxide

003.01 Primary standard

Level: 100 parts per billion
Averaging time: 1-hour
Form: 98th percentile averaged over 3 years

003.02 Primary and secondary standards

Level: 53 parts per billion
Averaging time: Annual
Form: Annual mean

(Attainment of this standard is determined in accordance with Appendix S of 40 CFR Part 50 (version July 1, 2013); which is adopted and incorporated herein)

004 Carbon monoxide – Primary standards

Level: 9 parts per million

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Averaging time: 8-hours
Form: Not to be exceeded more than once per year

Level: 35 parts per million
Averaging time: 1-hour
Form: Not to be exceeded more than once per year

(Attainment of this standard is determined in accordance with 40 CFR 50.8. (version July 1, 2013); which is adopted and incorporated herein)

005 Ozone – Primary and secondary standards

Level: 0.075 parts per million (0.075 ppm)
Averaging time: 8-hour
Form: Annual fourth-highest daily maximum 8-hour concentration averaged over 3 years

(Attainment of this standard is determined in accordance with Appendix P of 40 CFR Part 50 (Version July 1, 2013); which is adopted and incorporated herein)

006 Lead – Primary and secondary standard

Level: 0.15 micrograms per cubic meter
Averaging time: Rolling three-month average
Form: Not to be exceeded

(Attainment of this standard is determined in accordance with Appendix R of 40 CFR Part 50 (Version July 1, 2013); which is adopted and incorporated herein)

007 Total reduced sulfur

Level: 10.0 parts per million (10.0 ppm)
Averaging time: 1 minute
Form: Maximum average concentration

Level: 0.10 parts per million (0.10 ppm)
Averaging time: 30-minutes
Form: Maximum rolling average

007.01 Except as provided in 007.01A and 007.01B these standards apply only where human exposure occurs.

007.01A Ambient concentrations of total reduced sulfur (TRS) emissions occurring as a result of natural activities that have no associated economic benefits, such as seasonal stratification or turnover of lakes and lagoons, and the release of water uncontaminated by process or industrial activity from lakes, reservoirs, lagoons and water impoundment systems shall not constitute violation of the standards contained in section 007.

007.01B The Department shall provide reasonable opportunity for any owner or operator of any source causing or contributing to a violation of the standards in 007 to develop and implement a program to eliminate such violations prior to taking enforcement action.

007.02 Unless otherwise approved by the Director, the levels of TRS in the ambient air shall be measured using a TRS thermal converter in conjunction with an SO₂ monitor. The SO₂ monitor shall be designated as an EPA reference method or equivalent method in accordance with 40 CFR Part 53. In combination, the monitor must meet or exceed the following minimum specifications:

007.02A Lower detection limit of 0.4 ppb (parts per billion);

007.02B Zero Drift less than 0.5 ppb in 24 hours and less than 1 ppb in 7 days at constant conditions;

007.02C Span Drift of less than 0.5 percent of the reading in 24 hours and less than 1 percent of the reading in 7 days at constant conditions;

007.02D Precision of 0.5 percent of the reading; and

007.02E Linearity of 1 percent of full scale.

007.03 A rolling average shall be considered valid if there is data for at least 75 percent of the period in question. In the event that less than 100 percent of the data are available, the rolling average shall be computed on the basis of the data available using the number of data available as the divisor.

007.04 The standards are attained when all of the following conditions are met:

007.04A The one-minute concentration is less than or equal to 10.0 ppm, rounded to one decimal place (fractional parts equal to or greater than 0.05 ppm must be rounded up);

007.04B The 30-minute rolling arithmetic mean concentration is less than or equal to 0.10 ppm, rounded to two decimal places (fractional parts equal to or greater than 0.005 ppm must be rounded up);

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Enabling Legislation: Neb. Rev. Stat. §§81-1504(1)(2), 81-1505(1)(12)

Legal Citation: Title 129, Ch. 4, Nebraska Department of Environmental Quality