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 PM_{10} – Primary and secondary standards

Level: 150 micrograms per cubic meter
Averaging time: 24-hours
Form: Not to be exceeded more than ~~one exceedance~~ once per year on average over 3 years

(Attainment of these standards ~~are~~ is determined in accordance with Appendix K of 40 CFR Part 50 (version July 1, 2012); which is adopted and incorporated herein)~~.~~

001.02 $PM_{2.5}$ – Primary and secondary standards

Level: 15.0 micrograms per cubic meter
Averaging time: Annual
Form: Annual ~~arithmetic~~ mean averaged over 3 years

Level: 35 micrograms per cubic meter
Averaging time: 24-hour
Form: 98th percentile averaged over 3 years

(Attainment of these standards is determined in accordance with Appendix N of 40 CFR Part 50 (version July 1, 2012); which is adopted and incorporated herein)~~.~~

002 Sulfur dioxide

002.01 Primary standard

Level: ~~80 micrograms per cubic meter (0.03 ppm)~~75 parts per billion ~~(~200 micrograms per cubic meter at standard temperature and pressure)~~

Averaging time: ~~Annua~~1-hour
Form: ~~Arithmetic mean~~99th percentile of 1-hour daily maximum concentrations averaged over 3 years

~~Level: 365 micrograms per cubic meter (0.14 ppm)~~

~~Averaging time: 24-hour maximum~~
~~Form: Not to be exceeded more than once a year~~

002.02 Secondary standard

Level: ~~1300 micrograms per cubic meter (0.5 ppm)~~ 0.5 parts per million ~~(~1300 micrograms per cubic meter at standard temperature and pressure)~~
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, 2012); which is adopted and incorporated herein)

003 Nitrogen dioxide~~ – Primary and secondary standards~~

003.01 Primary standard

Level: ~~100 micrograms per cubic meter (0.05 ppm)~~ 100 parts per billion ~~(~200 micrograms per cubic meter at standard temperature and pressure)~~
Averaging time: 1-hour
Form: 98th percentile averaged over 3 years

003.02 Primary and secondary standards

Level: ~~100 micrograms per cubic meter (0.05 ppm)~~53 parts per billion ~~(~100 micrograms per cubic meter at standard temperature and pressure)~~

Averaging time: Annual
Form: ~~Arithmetic~~ Annual mean

(Attainment of this standard is determined in accordance with Appendix S of 40 CFR Part 50 (version July 1, 2012); which is adopted and incorporated herein)

004 Carbon monoxide – Primary ~~and secondary~~ standards

Level: ~~10 milligrams per cubic meter (9 ppm)~~9 parts per million ~~(~10 milligrams per cubic meter at standard temperature and pressure)~~
Averaging time: 8-hours
Form: ~~Maximum concentration n~~Not to be exceeded more than once ~~a~~ per year

Level: ~~40 milligrams per cubic meter (35 ppm)~~35 parts per million ~~(~40 milligrams per cubic meter at standard temperature and pressure)~~
Averaging time: 1-hour
Form: ~~Maximum concentration n~~Not to be exceeded more than once ~~a~~ per year

(Attainment of this standard is determined in accordance with 40 CFR 50.8. (version July 1, 2012); which is adopted and incorporated herein)

005 Ozone – Primary and secondary standards

~~Level: 235 micrograms per cubic meter (0.12 ppm)~~
~~Averaging time: 1-hour~~
~~Form: Maximum concentration not to be exceeded more than one day a year~~

~~(Attainment of this standard is determined in accordance with Appendix H of 40 CFR Part 50; which is adopted and incorporated herein).~~
Level (1997 standard): 0.08 parts per million (0.08 ppm)
Averaging time: 8-hour
Form: ~~Daily maximum average concentration~~ Annual fourth-highest daily maximum 8-hour concentration averaged over 3 years

(Attainment of this standard is determined in accordance with Appendix I of 40 CFR Part 50 (Version July 1, 2012); which is adopted and incorporated herein)~~.~~

Level (2008 standard): 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, 2012); which is adopted and incorporated herein)

006 Lead – Primary and secondary standard

Level: ~~1.5~~ 0.15 micrograms per cubic meter
Averaging time: ~~Calendar quarter~~ Rolling three-month average
Form: ~~Arithmetic mean~~ Not to be exceeded

(Attainment of this standard is determined in accordance with Appendix R of 40 CFR Part 50 (Version July 1, 2012); 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);

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

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