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 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

(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).

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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

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 U of 40 CFR Part 50 (Version July 1, 2016); 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

 $\underline{007.01}$ Except as provided in $\underline{007.01A}$ and $\underline{007.01B}$ 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.

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

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 $\underline{007.02}$ 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 SO_2 monitor. The SO_2 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;

 $\underline{007.02C}$ 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.

<u>007.04</u> The standards are attained when all of the following conditions are met:

 $\underline{007.04A}$ 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);

 $\underline{007.04B}$ 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

EPA Rulemakings

40 C.F.R. 52.1420(c) CFR: FRM: 84 FR 14878 (4/12/2019) PRM: 84 FR 5032 (2/20/2019) State Submission: 8/22/18 (effective 7/15/18)

State Final: 7/15/18

NE 99; EPA-R07-OAR-2018-0852 APDB File:

Description: This revision to 005 amends the ozone standard and the reference to regulatory

appendix. The standard was revised from $\frac{1}{75}$ to 70 ppb in 2015.

CFR: 40 C.F.R. 52.1420(c) FRM: 81 FR 70023 (10/11/2016) 81 FR 70065 (10/11/2016) PRM: State Submission: 3/6/2014 and 7/14/14

Title 129, Chapters 4 (7/14/2014), 19, and 22 (3/6/2014)State Final:

NE-90; EPA-R07-OAR-2016-0556 effective 12/12/16. APDB File:

Description: This revision to Chapter 4 amends the ambient air quality standards for PM10, PM2.5, SO2, NO2, CO, O3, and Pb making them consistent with National Ambient Air Quality Standards (NAAQS) found at 40 CFR part 50, as of the date of the state's submittal, July 14, 2014.

Note: NDEQ submitted two revisions to Chapter 4, one was submitted on 3/6/2014 and the other on 7/14/2014. The second revision submitted on 7/14/2014 contained the same revisions requested on 3/6/2014with minor changes. The 7/14/2014 submittal is being approved into the SIP at this time.

40 C.F.R. 52.1420(c) 80 FR 51952 (08/27/2015) FRM: PRM: 80 FR 30404 (05/28/2015)

State Submission: 4/29/2008

State Final:

APDB File: NE-71, NE-73, NE-82

This revision repeals the annual NAAQS for PM 10 and adopts the federal 24-hour NAAQS Description: for PM2.5. The standard was reduced from 65 to 35 micrograms per cubic meter by EPA on December 18,

CFR: 40 C.F.R. 52.1420(c) 68 FR 40528 (07/08/2003) FRM: 68 FR 40617 (07/08/2003) State Submission: 05/10/2002 and 11/05/2002 04/01/2002 and 07/10/2002 State Final:

APDB File: NE-54 and NE-57

This revision approved the adoption of new standards for fine particulate matter Description: (PM2.5) and ozone and also the data interpretation procedures of Appendix I and Appendix N of 40 CFR part 50 for ozone and particulate matter.

CFR: 40 C.F.R. 52.1420(c)(41) 60 FR 372 (01/04/95) FRM: PRM: 60 FR 418 (01/04/95)

State Submission: 2/16/94 State Proposal: 12/17/93 6/26/94 State Final: APDB File: NE-31

The EPA approved the renumbering of this rule as part of the overall recodification Description: of the Nebraska rules. The rule was previously Chapter 3. The standards for total suspended particulate matter were deleted.

Note: All previous versions of the rule are obsolete; the record of prior rulemakings is shown below for historical purpose only.

CFR: 40 C.F.R. 52.1420(c)(39) 56 FR 50515 (10/7/91) FRM:

None PRM: State Submission: 3/8/91 State Proposal: 12/7/90 State Final: 2/20/91 APDB File: NE - 30

The EPA approved a revision as part of an update of a number of regulations. The Description: state deleted the word "national" from the definition of air quality standards because the state still enforces a particulate matter standard.

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CFR: 40 C.F.R. 52.1420(c)(37) FRM: 54 FR 21059 (5/16/89)

PRM: None
State Submission: 6/15/88
State Proposal: 2/5/88
State Final: 6/5/88
APDB File: NE-21

Description: The EPA approved this rule as Chapter 3 as part of an action to update the entire set of regulations in the Nebraska SIP. The state's revisions included the addition of a PM_{10} standard, lead standard, a method for ozone determination, and deletion of the hydrocarbon standard.

Difference Between the State and EPA-Approved Regulation

None.