

PROPOSED REGULATION OF THE STATE ENVIRONMENTAL COMMISSION

LCB File No. R027-15

(This draft replaces the one posted 6.15.2015; it was inadvertently switched with R028-15)

P2015- 02

June 11, 2015

EXPLANATION – Matter in *italics* is new; matter in brackets ~~omitted material~~ is material to be omitted.

AUTHORITY: §§1 and 2, NRS 445B.210.

A PERMANENT REGULATION relating to air pollution; revising provisions governing ambient air quality standards and providing other matters properly relating thereto.

Section 1. Chapter 445B of NAC is hereby amended by adding thereto the provisions set forth as sections 2 and 3 of this regulation.

Sec. 2. *“PM2.5 emissions” means any particulate matter, including gaseous emissions that condense to form particulate matter at ambient temperatures, emitted directly from an air emissions source or activity with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers as measured by an approved reference method or equivalent method based on 40 C.F.R. Part 50, Appendix L, and designated in accordance with 40 C.F.R. Part 53.*

Sec. 3. *“PM10 emissions” means any particulate matter, including gaseous emissions that condense to form particulate matter at ambient temperatures, emitted directly from an air emissions source or activity with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by an approved reference method or equivalent method based on 40 C.F.R. Part 50, Appendix L, and designated in accordance with 40 C.F.R. Part 53.*

Sec. 4. NAC 445B.22097 is hereby amended to read as follows:

445B.22097 1. The table contained in this section lists the minimum standards of quality for ambient air.

		NEVADA STANDARDS ^A		NATIONAL STANDARDS ^B		
POLLUTANT	AVERAGING TIME	CONCENTRATION ^C	METHOD ^D	PRIMARY ^{C, E}	SECONDARY ^{C, F}	METHOD ^D
Ozone	8 hours	0.075 ppm	Chemiluminescence	0.075 ppm	Same as primary	Chemiluminescence
Ozone-Lake Tahoe Basin, #90	1 hour	0.10 ppm (195 µg/m ³)	Ultraviolet absorption	--	--	--
Carbon monoxide less than 5,000' above mean sea level	8 hours	9 ppm (10,500 µg/m ³)	Nondispersive infrared photometry	9 ppm (10 mg/m ³)	None	Nondispersive infrared photometry
At or greater than 5,000' above mean sea level		6 ppm (7,000 µg/m ³)				
Carbon monoxide at any elevation	1 hour	35 ppm (40,500 µg/m ³)		35 ppm (40 mg/m ³)		
Nitrogen dioxide	Annual arithmetic mean	0.053 ppm (100 µg/m ³)	Gas phase chemiluminescence	53 ppb ^G	Same as primary	Gas phase chemiluminescence
	1 hour	100 ppb	--	100 ppb	None	
Sulfur dioxide	Annual arithmetic mean	0.030 ppm (80 µg/m ³)	Ultraviolet fluorescence	0.03 ppm ^H (1971 standard)	None	Spectrophotometry (Pararosaniline method)
	24 hours	0.14 ppm (365 µg/m ³)		0.14 ppm ^H (1971 standard)		
	3 hours	0.5 ppm (1,300 µg/m ³)		None	0.5 ppm	
	1 hour	75 ppb	--	75 ppb	None	
Particulate matter as PM ₁₀	{Annual arithmetic Mean}	{50 µg/m³}	High volume PM ₁₀ sampling	{None}	{None}	{--}
	24 hours	150 µg/m ³		150 µg/m ³	Same as primary	High or low volume PM ₁₀ sampling
Particulate matter as PM _{2.5}	Annual arithmetic mean	{15.0} 12.0 µg/m ³	--	{15.0} 12.0 µg/m ³	Same as primary	Low volume PM _{2.5} sampling
	24 hours	35 µg/m ³	--	35 µg/m ³	Same as primary	
Lead (Pb)	Rolling 3 mo. average	0.15 µg/m ³	High volume sampling, acid extraction and atomic absorption spectrometry	0.15 µg/m ³	Same as primary	High volume sampling, acid extraction and atomic absorption spectrometry
Hydrogen sulfide	1 hour	0.08 ppm (112 µg/m ³) ^I	Ultraviolet fluorescence	--	--	--

Notes:

Note A: The Director shall use the Nevada standards in considering whether to issue a permit for a stationary source and shall ensure that the stationary source will not cause the Nevada standards to be exceeded in areas where the general public has access. For the 2006 particulate matter as PM_{2.5} 24-hour and annual standards, the 2010 nitrogen dioxide 1-hour standard and the 2010 sulfur dioxide 1-hour standard, the Director shall use the form of the standards set forth in 40 C.F.R. §§ 50.11, 50.13 and 50.17, as those provisions existed on the effective date of this regulation, to ensure that the Nevada standard is no more stringent than the National standard in determining whether the stationary source will comply with the Nevada standards in areas where the general public has access.

Note B: The National standards are used in determinations of attainment or nonattainment. The form of a National standard is the criteria which must be satisfied for each respective concentration level of a standard for the purposes of attainment. The form for each National standard is set forth in 40 C.F.R. Part 50 and may be viewed at **<http://www.epa.gov/air/criteria.html>**.

Note C: Where applicable and except as otherwise described in Note G, concentration is expressed first in units in which it was adopted. Measurements of air quality that are expressed as mass per unit volume, such as micrograms per cubic meter, must be corrected to a reference temperature of 25 degrees Centigrade and a reference pressure of 760mm of Hg (1,013.2 millibars), except measurements of particulate matter as PM_{2.5} and lead (Pb), which are calculated in micrograms per cubic meter at local conditions; “ppb” in this table refers to parts per billion by volume, or nanomoles of regulated air pollutant per mole of gas; “ppm” refers to

parts per million by volume, or micromoles of regulated air pollutant per mole of gas; “ $\mu\text{g}/\text{m}^3$ ” refers to micrograms per cubic meter.

Note D: Reference method as described by the EPA. Any reference method specified in accordance with 40 C.F.R. Part 50 or any reference method or equivalent method designated in accordance with 40 C.F.R. Part 53 may be substituted.

Note E: National primary standards are the levels of air quality necessary, with an adequate margin of safety, to protect the public health.

Note F: National secondary standards are the levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a regulated air pollutant.

Note G: The official National annual standard for nitrogen dioxide is 0.053 ppm. The National annual standard is identified in this table in equivalent units of parts per billion for the purpose of simplifying its comparison with the National 1-hour standard which is also identified in parts per billion.

Note H: The 1971 National sulfur dioxide standards remain in effect for an area until 1 year after the area is designated for the 2010 National sulfur dioxide standard, except that in an area designated nonattainment for the 1971 National sulfur dioxide standards, the 1971 standards remain in effect until an implementation plan to attain or maintain the 2010 National sulfur dioxide standards is approved.

Note I: The ambient air quality standard for hydrogen sulfide does not include naturally occurring background concentrations.

2. These standards of quality for ambient air are minimum goals, and it is the intent of the Commission in this section to protect the existing quality of Nevada’s air to the extent that it is economically and technically feasible.