

PROPOSED REGULATION OF THE STATE ENVIRONMENTAL COMMISSION

LCB File No. R038-12

P2012-03

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

AUTHORITY: §1, NRS 445B.210.

A PERMANENT REGULATION relating to the State Environmental Commission revising the provisions governing national ambient air quality standards; and providing other matters properly relating thereto.

Section . 1. NAC 445B.22097 is hereby amended to read as follows:

NAC 445B.22097 Standards of quality for ambient air.

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	1 hour	0.12 ppm (235 µg/m ³)	Ultraviolet absorption	0.12 ppm ^G {(235 µg/m³)} (1979 std)	Same as primary	Chemiluminescence
	<i>8-hour</i>	--	--	0.075 ppm (2008 std)		
				0.08 ppm ^H (1997 std)		
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				
Nitrogen dioxide	Annual arithmetic mean	0.053 ppm (100 µg/m ³)	Gas phase chemiluminescence	{0.053 ppm} {(100 µg/m³)} 53 ppb ^I	Same as primary	Gas phase chemiluminescence
	<i>1 hour</i>	--	--	100 ppb		

		NEVADA STANDARDS ^A		NATIONAL STANDARDS ^B		
POLLUTANT	AVERAGING TIME	CONCENTRATION ^C	METHOD ^D	PRIMARY ^{C, E}	SECONDARY ^{C, F}	METHOD ^D
Sulfur dioxide	Annual arithmetic mean	0.030 ppm (80 µg/m ³)	Ultraviolet fluorescence	0.030 0.03 ppm _J (1971 std)	None	Spectrophotometry (Pararosaniline method)
	24 hours	0.14 ppm (365 µg/m ³)		0.14 ppm _J (1971 std)		
	3 hours	0.5 ppm (1,300 µg/m ³)		None	0.5 ppm	
	1 hour	--		--	75 ppb	
Particulate matter as PM ₁₀	Annual arithmetic mean	50 µg/m ³	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 average	--	--	15.0 µg/m ³	Same as primary	Low volume PM _{2.5} sampling
	24-hour	--	--	35 µg/m ³	Same as primary	
Lead (Pb)	Nevada: Quarterly arithmetic mean; National: Rolling 3 mo. average	1.5 µg/m ³	High volume sampling, acid extraction and atomic absorption spectrometry	1.5 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) 0.08	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.

Note B: ~~[These standards, other than for ozone, particulate matter, and those based on annual averages, must not be exceeded more than once per year. The 1-hour ozone standard is attained when the expected number of days per calendar year with a maximum hourly average concentration above the standard is equal to or less than one. The PM₁₀ 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above the standard, rounded to the nearest 10 µg/m³, is equal to or less than one. The expected number of days per calendar year is generally based on an average of the number of times the standard has been exceeded per year for the last 3 years.]~~ The National standards are to be used in determinations of attainment or nonattainment. *The “form” of the national standard defines the air quality statistic that is to be compared to the level of the standard in determining whether an area attains the standard.*

- *To attain the 2008 ozone standard, the 3-year average of the fourth-highest daily maximum 8-hour average ozone concentrations measured at each monitor within an area over each year must not exceed 0.075 ppm*
- *To attain the 1997 ozone standard, the 3-year average of the fourth-highest daily maximum 8-hour average ozone concentrations measured at each monitor within an area over each year must not exceed 0.08 ppm.*

- *The carbon monoxide standard is not to be exceeded more than once per year.*
- *To attain the 1-hour nitrogen dioxide standard, the 3-year average of the 98th percentile of the daily maximum 1-hour average at each monitor within an area must not exceed 100 ppb.*
- *To attain the 1-hour sulfur dioxide standard, the 3-year average of the 99th percentile of the daily maximum 1-hour average at each monitor within an area must not exceed 75 ppb.*
- *The 24-hour PM10 standard is not to be exceeded more than once per year on average over 3 years.*
- *To attain the annual PM2.5 standard, the 3-year average of the weighted annual mean PM2.5 concentrations from single or multiple community-oriented monitors must not exceed 15.0 µg/m³.*
- *To attain the 24-hour PM2.5 standard, the 3-year average of the 98th percentile of 24-hour concentrations at each population-oriented monitor within an area must not exceed 35 µg/m³.*
- *The lead standard is not to be exceeded when averaged over a 3-month rolling period, evaluated over a 3-year period.*

Note C: Where applicable, concentration is expressed first in units in which it was adopted. All 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 760 mm of Hg (1,013.2 millibars); “ppm” in this table refers to parts per million by volume, or micromoles of regulated air pollutant per mole of gas; “µg/m³” refers to micrograms per cubic meter.

Note D: 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: EPA revoked the 1-hour ozone standard in all areas, although some areas have continuing obligations under that standard ("anti-backsliding"). The standard is attained when the expected number of days per calendar year with maximum hourly average concentrations above 0.12 ppm is ≤ 1.

Note H: The 1997 standard and the implementation rules for that standard will remain in place for implementation purposes as EPA undertakes rulemaking to address the transition from the 1997 ozone standard to the 2008 ozone standard.

Note I: The official level of the annual NO₂ standard is 0.053 ppm, equal to 53 ppb, which is shown here for the purpose of clearer comparison to the 1-hour standard.

Note J: The 1971 sulfur dioxide standards remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

Note ~~G~~~~H~~~~K~~: 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.

Section 2. NAC 445B.221 is hereby amended to read as follows:

445B.221 Adoption by reference and applicability of certain provisions of federal law and regulations.

1. Title 40 C.F.R. §§ 51.100(s), 51.100(nn) and 51.301 and Appendix S of 40 C.F.R. Part 51 are hereby adopted by reference as they existed on July 1, 2010.

2. Title 40 C.F.R. § 51.165 is hereby adopted by reference as it existed on July 1, 2002.

3. Appendices M and W of 40 C.F.R. Part 51 are hereby adopted by reference as they existed on ~~July 1, 2010~~ *January 1, 2011*.

4. Title 40 C.F.R. § 52.21 is hereby adopted by reference as it existed on July ~~18~~ *20*, 2011.

5. Appendix E of 40 C.F.R. Part 52 is hereby adopted by reference as it existed on July 1, 2011.

6. The following subparts of 40 C.F.R. Part 60 are hereby adopted by reference:

(a) Subpart A, except §§ 60.4, 60.8(b)(2), 60.8(b)(3), 60.8(g) and 60.11(e), as it existed on July 1, 2011;

(b) Section 60.21 of Subpart B, as it existed on July 1, 2011;

(c) Subparts C, Cb, Cc, Cd, Ce, D, Da, Db, Dc, E, Ea, Eb, Ec, F, G, H, I, J, K, Ka, Kb, L, M, N, Na, O, P, Q, R, S, T, U, V, W, X, Y, Z, AA, AAa, BB, CC, DD, EE, GG, HH, KK, LL, MM, NN, PP, QQ, RR, SS, TT, UU, VV, VVa, WW, XX, BBB, DDD, FFF, GGG, GGGa, HHH, III, JJJ, KKK, LLL, NNN, OOO, PPP, QQQ, RRR, SSS, TTT, UUU, VVV, WWW, AAAA, CCCC, DDDD, EEEE, FFFF and KKKK as they existed on July 1, 2011;

(d) Subpart HHHH, except §§ 60.4105(b)(2), 60.4106, 60.4120 to 60.4142, inclusive, 60.4153(a) and (b) and 60.4176, as it existed on June 9, 2006; and

(e) Subparts IIII and JJJJ as they existed on August 29, 2011.

7. Appendices A, B and F of 40 C.F.R. Part 60 are hereby adopted by reference:

(a) Appendix A as it existed on July 1, 2010; and

(b) Appendices B and F as they existed on July 1, 2011.

8. Subparts A, C, D, E, F, H, I, J, K, L, N, O, P, Q, R, T, V, W, Y, BB and FF of 40 C.F.R. Part 61 are hereby adopted by reference as they existed on July 1, 2010.

9. Appendix B of 40 C.F.R. Part 61 is hereby adopted by reference as it existed on July 1, 2010.

10. The following subparts of 40 C.F.R. Part 63 are hereby adopted by reference:

(a) Subpart A as it existed on July 1, 2010;

(b) Subparts B, C, F, G, H, I, J, L, M, N, O, Q, R, S, T, U, W, X, Y, AA, BB, CC, DD, EE, GG, HH, II, JJ, KK, LL, MM, OO, PP, QQ, RR, SS, TT, UU, VV, WW, XX, YY, CCC, DDD, EEE, GGG, HHH, III, JJJ, LLL, MMM, NNN, OOO, PPP, QQQ, RRR, TTT, UUU, VVV, XXX, AAAA, CCCC, DDDD, EEEE, FFFF, GGGG, HHHH, IIII, JJJJ, KKKK, MMMM, NNNN, OOOO, PPPP, QQQQ, RRRR, SSSS, TTTT, UUUU, VVVV, WWWW, XXXX, YYYY, ZZZZ, AAAAA, BBBBB, CCCCC, DDDDD, EEEEE, FFFFF, GGGGG, HHHHH, JJJJJ, KKKKK, LLLLL, MMMMM, NNNNN, PPPPP, QQQQQ, SSSSS, WWWWW, YYYYY, ZZZZZ, BBBBBB, CCCCCC, DDDDD, EEEEE, FFFFF, GGGGG, HHHHH, JJJJJ, LLLLLL, MMMMMM, NNNNNN, OOOOO, PPPPP, QQQQQ, RRRRR, SSSSS,

TTTTTT, VVVVVV, XXXXXX, ZZZZZZ, AAAAAA, BBBBBB CCCCCC and EEEEEEE, as they existed on July 1, 2011; and

(c) Subpart WWWWWW as it existed on October 19, 2011.

11. Appendix A of 40 C.F.R. Part 63 is hereby adopted by reference as it existed on July 1, 2011.

12. Title 40 C.F.R. Part 72 is hereby adopted by reference as it existed on July 1, 2011. If the provisions of 40 C.F.R. Part 72 conflict with or are not included in NAC 445B.001 to 445B.3689, inclusive, and sections 2 to 7, inclusive, of LCB File No. R014-11, the provisions of 40 C.F.R. Part 72 apply.

13. Title 40 C.F.R. Part 76 is hereby adopted by reference as it existed on July 1, 2011. If the provisions of 40 C.F.R. Part 76 conflict with or are not included in NAC 445B.001 to 445B.3689, inclusive, and sections 2 to 7, inclusive, of LCB File No. R014-11, the provisions of 40 C.F.R. Part 76 apply.

14. Title 42 of the United States Code, section 7412(b), List of Hazardous Air Pollutants, is hereby adopted by reference as it existed on October 1, 1993.

15. The Standard Industrial Classification Manual, 1987 edition, published by the United States Office of Management and Budget, is hereby adopted by reference. A copy of the manual may be obtained, free of charge, from the United States Department of Labor at the Internet address <http://www.dol.gov>.

16. A copy of the publications which contain the provisions adopted by reference in subsections 1 to 14, inclusive, may be obtained from the:

(a) Division of State Library and Archives of the Department of Cultural Affairs for 10 cents per page.

(b) Government Printing Office, free of charge, at the Internet address <http://www.gpoaccess.gov/nara/index.html>.

17. The following standards of ASTM International are hereby adopted by reference:

(a) ASTM D5504, "Standard Test Method for Determination of Sulfur Compounds in Natural Gas and Gaseous Fuels by Gas Chromatography and Chemiluminescence," set forth in Volume 05.06 of the *2008 Annual Book of ASTM Standards*. A copy of ASTM D5504 is available by mail from ASTM International, 100 Barr Harbor Drive, West Conshohocken, Pennsylvania 19428-2959, by telephone at (610) 832-9585 or at the Internet address <http://www.astm.org>, for the price of \$40.

(b) ASTM D2234 and D2234M, "Standard Practice for Collection of a Gross Sample of Coal," set forth in Volume 05.06 of the *2008 Annual Book of ASTM Standards*. A copy of ASTM D2234 and D2234M is available by mail from ASTM International, 100 Barr Harbor Drive, West Conshohocken, Pennsylvania 19428-2959, by telephone at (610) 832-9585 or at the Internet address <http://www.astm.org>, for the price of \$40.

(c) ASTM D2013, "Standard Practice for Preparing Coal Samples for Analysis," set forth in Volume 05.06 of the *2008 Annual Book of ASTM Standards*. A copy of ASTM D2013 is available by mail from ASTM International, 100 Barr Harbor Drive, West Conshohocken, Pennsylvania 19428-2959, by telephone at (610) 832-9585 or at the Internet address <http://www.astm.org>, for the price of \$46.

(d) ASTM D6784, "Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method)," set forth in Volume 11.07 of the *2008 Annual Book of ASTM Standards*. A copy of ASTM D6784 is available by mail from ASTM International, 100 Barr Harbor Drive, West

Conshohocken, Pennsylvania 19428-2959, by telephone at (610) 832-9585 or at the Internet address <http://www.astm.org>, for the price of \$46.

(e) ASTM D2015, "Standard Test Method for Gross Calorific Value of Coal and Coke by the Adiabatic Bomb Calorimeter," dated April 10, 2000. A copy of ASTM D2015 is available for purchase at the IHS Standards Store, 15 Inverness Way East, M/S A110B, Englewood, Colorado 80112, or at the Internet address <http://global.ihs.com>, for the price of \$56.

(f) ASTM D3286, "Standard Test Method for Gross Calorific Value of Coal and Coke by the Isoperibol Bomb Calorimeter," dated July 10, 1996. A copy of ASTM D3286 is available for purchase at the IHS Standards Store, 15 Inverness Way East, M/S A110B, Englewood, Colorado 80112, or at the Internet address <http://global.ihs.com>, for the price of \$56.

(g) ASTM D1989, "Standard Test Method for Gross Calorific Value of Coal and Coke by Microprocessor Controlled Isoperibol Calorimeters," dated July 10, 1997. A copy of ASTM D1989 is available for purchase at the IHS Standards Store, 15 Inverness Way East, M/S A110B, Englewood, Colorado 80112, or at the Internet address <http://global.ihs.com>, for the price of \$56.

18. For the purposes of the provisions of 40 C.F.R. Parts 60, 61 and 63, adopted by reference pursuant to this section, the Director may not approve alternate or equivalent test methods or alternative standards or work practices.

19. Except as otherwise provided in subsections 12 and 13, the provisions adopted by reference in this section supersede the requirements of NAC 445B.001 to 445B.3689, inclusive, and sections 2 to 7, inclusive, of LCB File No. R014-11 for all stationary sources subject to the provisions adopted by reference only if those requirements adopted by reference are more stringent.

20. For the purposes of this section, "administrator" as used in the provisions of 40 C.F.R. Part 60, except Subpart B § 60.21 and Subpart HHHH §§ 60.4101 to 60.4105, inclusive, 60.4107 to 60.4114, inclusive, 60.4151 to 60.4173, inclusive, and 60.4175, and Parts 61 and 63, adopted by reference pursuant to this section, means the Director.