

**ADOPTED REGULATION OF THE
STATE ENVIRONMENTAL COMMISSION**

LCB File No. R145-13

Effective June 23, 2014

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

AUTHORITY: §§1 and 2, NRS 445B.210.

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

Legislative Counsel’s Digest:

Existing law authorizes the State Environmental Commission to adopt regulations to prevent, abate and control air pollution and to establish standards for air quality. (NRS 445B.210) This regulation revises provisions prescribing the minimum state and federal standards of quality for ambient air and requirements of certain environmental evaluations.

Section 1. 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

		NEVADA STANDARDS ^A		NATIONAL STANDARDS ^B		
POLLUTANT	AVERAGING TIME	CONCENTRATION ^C	METHOD ^D	PRIMARY ^{C, E}	SECONDARY ^{C, F}	METHOD ^D
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/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 mean	15.0 µg/m³	--	15.0 µg/m ³	Same as primary	Low volume PM _{2.5} sampling
	24 hours	35 µg/m³	--	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 June 23, 2014, 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. ~~All measurements~~ *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 ~~±~~), *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; “µg/m³” 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.

Sec. 2. NAC 445B.311 is hereby amended to read as follows:

445B.311 1. An environmental evaluation which is required for a new or modified stationary source pursuant to NAC 445B.308 to 445B.314, inclusive, or as required by the

Director must contain a careful and detailed assessment of the environmental aspects of the proposed stationary source and must also contain:

- (a) The name and address of the applicant;
- (b) The name, address and location of the stationary source;
- (c) A description of the proposed stationary source, including the normal hours of operation of the facility and the general types of activities to be performed;
- (d) A map showing the location of the stationary source and the topography of the area, including existing principal streets, roads and highways within 3 miles of the stationary source;
- (e) A site plan showing the location and height of buildings on the site;
- (f) Any additional information or documentation which the Director deems necessary to determine the effect of the stationary source on the quality of the ambient air, including measured data on the quality of the ambient air and meteorological conditions at the proposed site before construction or modification; and
- (g) ~~1A1~~ *Except as otherwise provided in subsection 5, a* dispersion analysis of each regulated air pollutant.

2. Where approval is sought for stationary sources to be constructed in phases, the information required by subsection 1 must be submitted for each phase of the construction project.

3. An environmental evaluation must also consider good engineering practice stack height. If the Director considers an analysis of a source based on a good engineering practice stack height that exceeds the height specified in paragraph (a) or (b) of subsection 1 of NAC 445B.083, the Director shall:

(a) Notify the public of the availability of the demonstration study performed pursuant to paragraph (c) of subsection 1 of NAC 445B.083; and

(b) Provide an opportunity for a public hearing on the demonstration study in accordance with the requirements for a Class I operating permit set forth in subsections 7, 9 and 10 of NAC 445B.3395.

4. A dispersion analysis used to determine the location and estimated value of the highest concentration of each regulated air pollutant must include:

(a) A dispersion model based on the applicable models, bases and other requirements specified in the “Guideline on Air Quality Models,” which is Appendix W of 40 C.F.R. Part 51, as adopted by reference in NAC 445B.221, except that the Director may authorize the modification of a model specified in the “Guideline on Air Quality Models” or the use of a model not included in the “Guideline on Air Quality Models” if the Director:

- (1) Determines that the modification or use is appropriate;
- (2) Obtains written approval of the modification or use from the Administrator; and
- (3) Provides notice of and establishes a 30-day period for comment in accordance with the applicable provisions of NAC 445B.3364, 445B.3395, 445B.3447, 445B.3457 or 445B.3477;

(b) A narrative report describing:

(1) If applicable, assumptions and premises used in the analysis, including, without limitation:

- (I) Model options chosen;
- (II) Urban versus rural selection;
- (III) Background concentrations;
- (IV) Characterization of emission sources as point, area or volume;

(V) Emission discharge points; and

(VI) Rate of emission from each emission unit; and

(2) The geographic area considered in the analysis, including, without limitation, information concerning:

(I) The nearest significant terrain features;

(II) The receptor grid or grids; and

(III) Restrictions on public access to the stationary source; and

(c) Valid meteorological information pursuant to the provisions of Appendix W of 40 C.F.R. Part 51, as adopted by reference in NAC 445B.221, which:

(1) For sources that are not subject to the permitting requirements of 40 C.F.R. § 52.21, as adopted by reference in NAC 445B.221:

(I) Is site specific, if the information exists pursuant to subsection 1 of this section or subsection 6 of NAC 445B.308, and which covers a period of not less than 1 year;

(II) Has been obtained from an off-site location representative of the proposed site and which covers a period of not less than 1 year;

(III) Represents the worst-case meteorological conditions, as approved by the Director for synthetic data; or

(IV) Has been obtained over the last 5 years at the nearest National Weather Service site; or

(2) For sources that are subject to the permitting requirements of 40 C.F.R. § 52.21, as adopted by reference in NAC 445B.221, is representative of the source site location and source emissions and which covers a period of not less than 1 year.

5. A dispersion analysis for:

(a) The 1-hour nitrogen dioxide standard established in NAC 445B.22097 is not required in an environmental evaluation for:

(1) A new stationary source if the new stationary source emits, or has the potential to emit, less than 40 tons of nitrogen dioxide per year; or

(2) A proposed modification to an existing stationary source if the proposed modification has the potential to emit less than 40 tons of nitrogen dioxide per year.

(b) The 1-hour sulfur dioxide standard established in NAC 445B.22097 is not required in an environmental evaluation for:

(1) A new stationary source if the new stationary source emits, or has the potential to emit, less than 40 tons of sulfur dioxide per year; or

(2) A proposed modification to an existing stationary source if the proposed modification has the potential to emit less than 40 tons of sulfur dioxide per year.

Permanent Regulation – Informational Statement

A Regulation Relating to Air Pollution Control

Legislative Review of Adopted Regulations as Required
by Administrative Procedures Act, NRS 233B.066 & 233B.0603.10(f)

State Environmental Commission (SEC) LCB File No: R145-13

Regulation R145-13:

The SEC has adopted an amendment to NAC 445B.22097, “*Standards of quality for ambient air,*” and NAC 445B.311, “*Environmental evaluation: Contents; consideration of good engineering practice stack height.*” The Nevada side of the ambient air quality standards table in NAC 445B.22097 was modified to further align it with the national ambient air quality standards (NAAQS) currently in effect. Specifically, the regulation revises the nitrogen dioxide (NO₂), sulfur dioxide (SO₂) and fine particulate matter (PM_{2.5}) standards in the Nevada side of the ambient air quality standards table. The revision to NAC 445B.311 modifies the environmental evaluation requirements for conducting an air dispersion analysis. In accordance with NAC 445B.311, an existing facility is not required to model if it has the potential to emit less than 25 tons per year for each pollutant standard. The amendment increases that threshold for the 2010 1-hour SO₂ and NO₂ NAAQS to 40 tons per year. As a service to regulated industries, the Nevada Division of Environmental Protection (NDEP) conducts modeling for facilities below the 25 tons per year threshold and will continue to do so for facilities below the new thresholds.

1. Need for Regulation:

These amendments are in response to a federal requirement. When the U.S. Environmental Protection Agency (USEPA) promulgates a new or revised NAAQS, states must submit a plan which provides for implementation, maintenance and enforcement of the standard pursuant to Clean Air Act § 110(a)(1). The amendment addresses the implementation of the 2006 PM_{2.5}, 2010 SO₂ and 2010 NO₂ NAAQS.

2. A description of how public comment was solicited, a summary of public response and an explanation of how other interested persons may obtain a copy of the summary.

A stakeholder meeting was held on November 6, 2013 to solicit comments and input regarding potential ways to implement the federal NAAQS. A subsequent workshop on the proposed regulatory amendments was held on November 26, 2013. As a result of public comments, the NDEP revised the proposed regulations. On March 20, 2014, the NDEP conducted another public workshop on LCB’s Revised Proposed Draft Regulation, R145-13. Both workshops were held in Carson City and video conferenced to Las Vegas. The meeting location in Carson City was the Nevada Department of Transportation, 1263 S. Stewart Street (3rd Floor Conference Room). In Las Vegas the meeting location was the Nevada Division of Environmental Protection, 2030 E. Flamingo Rd. Suite 230.

Sixteen (16) people attended the stakeholder meeting; thirty-three (33) people attended the November 26, 2013 workshop; and twelve (12) people attended the March 20, 2014 workshop. At the November workshop, industry representatives made several suggested changes and the NDEP subsequently revised the proposed regulation. At the March workshop there was discussion regarding the proposed regulation modifications, but no one opposed or suggested changes to the second revision of the draft regulation.

Summary minutes of both workshops are posted on the SEC website at:
http://sec.nv.gov/docs/R145_13_Wrkshp_Minutes_Nov.pdf
http://sec.nv.gov/docs/R145-13_Workshop_Minutes.pdf

Following the workshops, the SEC held a formal regulatory hearing on May 2, 2014 at the Nevada Department of Conservation and Natural Resources on Stewart Street in Carson City, Nevada. A public notice and agenda for the regulatory meeting was posted at the meeting location, at the State Library in Carson City, at the Office of NDEP in Las Vegas, at the Division of Minerals in Carson City, at the Department of Wildlife in Reno, on the LCB website, the Department of Administration website and was also sent to the SEC mailing list.

The public notice and the proposed permanent regulation, R145-13, were posted at the locations noted above, and additionally, were made available at county libraries throughout the state.

The public notice for the proposed regulation was published in the Las Vegas Review Journal and Reno Gazette Journal newspapers once a week for three consecutive weeks prior to the SEC regulatory meeting. Other information about this regulation was made available on the SEC website at: http://sec.nv.gov/main/hearing_0514.htm .

3. The number of persons who attended the SEC Regulatory Hearing:

(a) Attended May 2, 2014 hearing: 25 (approximately)

(b) Testified on this Petition at the hearing: 1

Allen Biaggi
Nevada Mining Association
201 W. Liberty Street, Suite 300
Reno, Nevada 89501
Phone: 775-829-2121

Mr. Biaggi spoke in support of the adoption of R145-13

(c) Submitted to the agency written comments: 1

Mark McSwain
Foreland Refining Corporation
1582 West 2600 South
Woods Cross, Utah 84087
Business Phone: (801) 298-9866

Mr. McSwain's concerns regarding the proposed regulation changes were resolved by addressing his individual permit, as opposed to the proposed regulation.

4. A description of how comment was solicited from affected businesses, a summary of their response, and an explanation of how other interested persons may obtain a copy of the summary.

Comments were solicited from affected businesses through e-mail, telephone, the stakeholder meeting, two public workshops and at the May 2nd Commission hearing as noted in number 2 above.

5. If the regulation was adopted without changing any part of the proposed regulation, a summary of the reasons for adopting the regulation without change.

The regulation was adopted without change as a result of the NDEP having revised the proposed regulation in response to stakeholder comments and conducting a second public workshop. No significant comments were received at the second workshop or at the SEC hearing that would cause a need for change.

6. The estimated economic effect of the adopted regulation on the business which it is to regulate and on the public.

- (a) Regulated Business/Industry. The economic effect of this regulation can only be determined on a case-by-case basis for each affected business. If the environmental evaluation shows that the emissions from a business are expected to exceed the air quality standards, the business must revise its operating procedures or install controls to reduce emissions. The cost will range from no cost to the cost of installing emission controls appropriate to the individual situation.

It is important to note that the new NO₂, SO₂, and PM_{2.5} standards are federal standards which industry must comply with regardless of whether the USEPA or the NDEP implements them.

- (b) Public. The proposed regulation will have beneficial effects in terms of improved health and welfare. The NAAQS are established to protect against adverse effects of polluted air on human health. The cleaner the emissions, the less health effects will be experienced by those persons downwind of the facility. In addition, the emissions reductions will also benefit public welfare. Such benefits include improved visibility and less damage to materials and ecosystems.

7. The estimated cost to the agency for enforcement of the adopted regulation.

There will be an incremental cost to the NDEP for implementing the required federal regulations; however, that cost is built into the fee structure of the Bureau of Air Pollution Control.

8. A description of any regulations of other state or government agencies which the proposed regulation overlaps or duplicates and a statement explaining why the duplication

or overlapping is necessary. If the regulation overlaps or duplicates a federal regulation, the name of the regulating federal agency.

This regulation does not duplicate any other federal, state or local regulation.

9. If the regulation includes provisions which are more stringent than a federal regulation, which regulates the same activity, a summary of such provisions.

The regulation is not more stringent than any federal regulation or guidance.

10. If the regulation provides a new fee or increases an existing fee, the total annual amount the agency expects to collect and the manner in which the money will be used.

The regulation does not address specific fees.