

**PROPOSED REGULATION OF THE
STATE ENVIRONMENTAL COMMISSION**

LCB File No. R042-13

August 19, 2013

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

AUTHORITY: §1, NRS 445B.210; §2, NRS 445B.210 and 445B.300.

A REGULATION relating to air pollution; revising provisions governing ambient air quality standards; deleting certain obsolete provisions governing the issuance or renewal of certain permits; and providing other matters properly relating thereto.

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 | {1-hour} | {0.12 ppm (235 µg/m³)} | {Ultraviolet absorption} | {0.12 ppm^G (1979 standard)} | Same as primary | Chemiluminescence |
| | 8 hours | { } 0.075 ppm | { } Chemiluminescence | 0.075 ppm {(2008 standard)} | | |
| 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) | | | | |
| 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 | 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) |

| | | NEVADA STANDARDS ^A | | NATIONAL STANDARDS ^B | | |
|---|---|--|--|--|---------------------------|--|
| POLLUTANT | AVERAGING TIME | CONCENTRATION ^C | METHOD ^D | PRIMARY ^{C, E} | SECONDARY ^{C, F} | METHOD ^D |
| | 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 | 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} ^I | Annual arithmetic mean | -- | -- | 15.0 µg/m ³ | Same as primary | Low volume PM _{2.5} sampling |
| | 24 hours | -- | -- | 35 µg/m ³ | Same as primary | |
| Lead (Pb) | Nevada: Quarterly arithmetic mean; National: Rolling 3 mo. average | 1.5 µg/m³ 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) ^{H, J} | 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: 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 ~~H~~ and except as otherwise described in Note G, 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); *“ppb” in this table refers to parts per billion by volume, or nanomoles of regulated air pollutant per mole of gas;* “ppm” ~~in this table~~ 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: *The reference method is specified 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 EPA revoked the National 1-hour ozone standard as it applies to all areas. However, anti-backsliding provisions in Federal law require certain areas to have continuing obligations under the National 1-hour ozone standard.~~ *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 provisions of Nevada’s applicable state implementation plan demonstrate that PM_{2.5} emissions from nonmajor stationary sources constitute a de minimis impact on the ambient level of PM_{2.5} found in the jurisdiction of the Division of Environmental Protection of the State Department of Conservation and Natural Resources and, therefore, individual source impact analyses for PM_{2.5} are not required.*

Note J: 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.308 is hereby amended to read as follows:

445B.308 1. Except for a Class IV operating permit, in any area designated as attainment or unclassifiable for a regulated air pollutant, before an operating permit or a revision of an operating permit may be issued:

- (a) For a new or modified stationary source;
- (b) For a plantwide applicability limitation; or
- (c) To allow a plantwide applicability limitation to expire and not be renewed,

↪ in accordance with NAC 445B.308 to 445B.314, inclusive, the applicant must submit to the Director an environmental evaluation and any other information the Director determines is necessary to make an independent air quality impact assessment.

2. The Director shall not issue an operating permit or a revision of an operating permit for any stationary source if the environmental evaluation submitted by the applicant shows, or if the Director determines, in accordance with the provisions of this section, that the stationary source:

(a) Will prevent the attainment and maintenance of the state or national ambient air quality standards. For the purposes of this paragraph, only those ambient air quality standards that have been established in NAC 445B.22097 need to be considered in the environmental evaluation.

(b) Will cause a violation of the applicable state implementation plan.

(c) Will cause a violation of any applicable requirement.

(d) Will not comply with subsection 4.

3. The Director shall not issue an operating permit or a revision of an operating permit for any stationary source if the Director determines, in accordance with subsection 3 of NAC 445B.311, that the degree of emission limitation required for control of an air pollutant under this section is affected by that amount of the stack height of any source as exceeds good engineering practice stack height, including a good engineering practice stack height demonstrated by a fluid model or a field study approved by the Director in accordance with paragraph (c) of subsection 1 of NAC 445B.083, or any other dispersion technique.

4. ~~Except as otherwise provided in subsection 5, to~~ **To** be issued an operating permit or a revision of an operating permit, the owner or operator of a major stationary source or major modification, as those terms are defined in 40 C.F.R. § 51.165, who proposes to construct in an area designated nonattainment for the regulated air pollutant or pollutants for which the stationary source or modification is major must:

(a) Comply with the provisions of 40 C.F.R. § 51.165, as adopted by reference in NAC 445B.221.

(b) Adopt as an emission limitation for the stationary source the lowest achievable emission rate for each nonattainment regulated air pollutant from the stationary source.

(c) Demonstrate that all other stationary sources within this State which are owned, operated or controlled by the applicant are in compliance or on a schedule of compliance with NAC 445B.001 to 445B.3689, inclusive, and all other applicable requirements and conditions of the permit.

(d) Conduct an analysis of any anticipated impact on visibility in any federal Class I area which may be caused by emissions from the stationary source.

(e) Conduct an analysis of alternative sites, sizes, processes of production and techniques for environmental control for the proposed stationary source. Except as otherwise provided in this paragraph, the analysis must demonstrate that the benefits of the proposed stationary source significantly outweigh the detrimental environmental and social effects that will result from its location, construction or modification. If the major stationary source or major modification proposes to locate in an area designated as marginal nonattainment for ozone, the analysis must demonstrate an offset ratio of 1.2 to 1 for volatile organic compounds and nitrogen oxides. For the purposes of this paragraph, a stationary source which is major for volatile organic compounds or nitrogen oxides shall be deemed major for ozone if the proposed location of the major stationary source or major modification is in an area designated as nonattainment for ozone.

(f) Comply with one of the following:

(1) Sufficient offsets in emissions must be obtained by the time the proposed stationary source begins operation to ensure that the total allowable emissions of each nonattainment regulated air pollutant from the existing stationary sources in the area, those stationary sources in

the area which have received their respective permits and the proposed stationary source will be sufficiently less than the total emissions from the existing stationary sources and those stationary sources in the area which have received their respective permits before the proposed stationary source applies for its operating permit or a revision of an operating permit, in order to achieve reasonable further progress; or

(2) If the major stationary source or major modification is located in a zone identified by the Administrator as one to be targeted for economic development, the owner or operator must demonstrate that the emission from the stationary source will not cause or contribute to emissions levels which exceed the allowance permitted for a regulated air pollutant for the nonattainment area.

↪ For the purposes of this paragraph, offsets must comply with the provisions of Appendix S of 40 C.F.R. Part 51, as adopted by reference in NAC 445B.221, and be coordinated with the appropriate local agency for the control of air pollution.

~~5. [To be issued an operating permit or a revision of an operating permit, the owner or operator of a major stationary source or major modification, as those terms are defined in 40 C.F.R. § 51.165, as adopted by reference in NAC 445B.221, who proposes to construct in an area designated as basic nonattainment for ozone must:~~

~~—(a) Comply with the provisions of 40 C.F.R. § 51.165, as adopted by reference in NAC 445B.221.~~

~~—(b) Adopt as an emission limitation for the stationary source the best available control technology for volatile organic compounds and nitrogen oxides from the stationary source.~~

~~—(c) Demonstrate that all other stationary sources within this State that are owned, operated or controlled by the applicant are in compliance or on a schedule of compliance with NAC~~

~~445B.001 to 445B.3689, inclusive, and all other applicable requirements and conditions of the permit.~~

~~—(d) Demonstrate an offset ratio of 1 to 1 for volatile organic compounds and nitrogen oxides.~~

~~For the purposes of this paragraph, a stationary source that is major for volatile organic compounds or nitrogen oxides shall be deemed major for ozone if the proposed location of the major stationary source or major modification is located in an area designated as basic nonattainment for ozone.~~

~~—(e) Comply with one of the following:~~

~~—(1) Sufficient offsets in emissions must be obtained by the time the proposed stationary source begins operation to ensure that the total allowable emissions of each nonattainment regulated air pollutant from the existing stationary sources in the area, those stationary sources in the area that have received their respective permits and the proposed stationary source will be sufficiently less than the total emissions from the existing stationary sources and those stationary sources in the area that received their respective permits before the proposed stationary source applies for its operating permit or a revision of an operating permit, in order to achieve reasonable further progress; or~~

~~—(2) If the major stationary source or major modification is located in a zone identified by the Administrator as one to be targeted for economic development, the owner or operator must demonstrate that the emissions from the stationary source will not cause or contribute to emissions levels which exceed the allowance permitted for a regulated air pollutant for the nonattainment area.~~

~~→ For the purposes of this paragraph, offsets must comply with the provisions of Appendix S of 40 C.F.R. Part 51, as adopted by reference in NAC 445B.221, and be coordinated with the appropriate local agency for the control of air pollution.~~

~~—6.†~~ To be issued an operating permit or a revision of an operating permit, the owner or operator of a major stationary source or major modification who proposes to construct in any area designated as attainment or unclassifiable under 42 U.S.C. § 7407(d) must comply with the provisions of 40 C.F.R. § 52.21, as adopted by reference in NAC 445B.221.

~~†7.†~~ 6. The Director may impose any reasonable conditions on his or her approval, including conditions requiring the owner or operator of the stationary source to:

(a) Conduct monitoring of the quality of the ambient air at the facility site for a reasonable period before the commencement of construction or modification and for any specified period after operation has begun at the stationary source; and

(b) Meet standards for emissions that are more stringent than those found in NAC 445B.001 to 445B.3689, inclusive.

~~†8.†~~ 7. If a proposed stationary source located on contiguous property is constructed or modified in phases which individually are not subject to review as provided in NAC 445B.308 to 445B.314, inclusive, all phases occurring since November 7, 1975, must be added together for determining the applicability of those sections.

~~†9.†~~ 8. Approval and issuance of an operating permit or a revision of an operating permit for any stationary source does not affect the responsibilities of the owner or owners to comply with any other portion of the applicable state implementation plan.

~~†10.†~~ 9. As used in this section:

(a) “Lowest achievable emission rate” has the meaning ascribed to it in 40 C.F.R. § 51.165, as adopted by reference in NAC 445B.221.

(b) “Offset ratio” means the percentage by which a reduction in an emission must exceed the corresponding increase in that emission.

(c) “Reasonable further progress” means the annual incremental reductions in emissions of the relevant regulated air pollutant that are required by 42 U.S.C. §§ 7501 to 7515, inclusive, or are required by the Administrator to ensure attainment of the applicable standard for national ambient air quality by the applicable date.

Sec. 3. 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) 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 ~~7~~ 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.