

PROPOSED AMENDMENTS TO NAC 445B.22097 and 445B.308

1. **Revisions to NAC 445B.22097, Standards of quality for ambient air.** The NDEP is proposing these revisions in response to EPA's Federal Register (FR) notice September 27, 2012 that imposed a FIP timeline for Nevada to remedy deficiencies in its permitting rules with respect to certain new or revised national ambient air quality standards. 77 FR 59321.

Proposed revisions:

- a. Add the 8-hour ozone NAAQS to the Nevada side of the table; delete the 1-hour standard.
- b. Revise the lead standard on the Nevada side of the table to align it with the NAAQS.
- c. Add a note explaining that PM_{2.5} emissions from non-major sources are de minimis and, therefore, individual source impact analyses for PM_{2.5} are not required.

Explanation:

On September 27, 2012, EPA acted to approve a major update of the permitting provisions in the Nevada applicable state implementation plan. However, in that action they also noted that, ". . . the submitted NSR rules do not address the new or revised national ambient air quality standards for PM_{2.5} and lead and must be revised accordingly." 77 FR 59326. Specifically, they identified the 2006 PM_{2.5} NAAQS and the 2008 Pb NAAQS. The NDEP has also identified a deficiency with respect to the 2008 ozone NAAQS.

The NDEP is proposing to add the 2008 lead and ozone NAAQS to the Nevada side of the ambient air quality standards table, after evaluating the potential impacts of that action on the regulated community. With respect to lead, there are no significant sources of lead emissions in Nevada, and the NDEP does not require monitoring of lead emissions in most operating permits. Therefore, there is no expected impact from aligning the Nevada ambient air quality standard for lead with the federal standard. For ozone, the NDEP evaluated whether Nevada sources might exceed the 2008 ozone standard of 0.075 ppm using the rural Scheffe Screening Tables. This is a conservative analysis, and it show that Nevada sources are under the 2008 standard by a wide margin. Therefore, there is no expected impact from aligning the Nevada ambient air quality standard for ozone with the federal standard.

We are not proposing to add the 2006 or 2012 PM_{2.5} NAAQS to the Nevada side of the standards table.

2. **Remove an obsolete subsection from NAC 445B.308.** Subsection 5 contains requirements for obtaining an operating permit in a basic ozone nonattainment area. The basic ozone nonattainment area was a classification category created by EPA for implementation of the 1997 ozone NAAQS in 2004. This classification category was subsequently challenged and EPA withdrew it. Thus, subsection 5 of NAC 445B.308 is obsolete.

July 3, 2013

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**PROPOSED REGULATION OF THE
STATE ENVIRONMENTAL COMMISSION**

P2013-02

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

NOTE: The NACs in this petition are based on LCB's 8-12 codification with amendments from LCB File Nos. R038-12, eff. 9-14-12, and R051-12, eff. 12-20-12 incorporated.

AUTHORITY: §1, NRS 445B.210.

A PERMANENT REGULATION relating to the State Environmental Commission revising the provisions governing national ambient air quality standards; removing obsolete provisions; 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/m³)]	[Ultraviolet absorption]	[0.12 ppm^G (1979-std)]	Same as primary	Chemiluminescence
	8-hour	[0.075 ppm]	[Chemiluminescence]	0.075 ppm [(2008-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	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 std)	None	Spectrophotometry (Pararosaniline method)
	24 hours	0.14 ppm (365 µg/m ³)		0.14 ppm ^H (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	--

		NEVADA STANDARDS ^A		NATIONAL STANDARDS ^B		
POLLUTANT	AVERAGING TIME	CONCENTRATION ^C	METHOD ^D	PRIMARY ^{C, E}	SECONDARY ^{C, F}	METHOD ^D
	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/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/m³	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) ¹	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. *Nevada's applicable state implementation plan provisions demonstrate that PM_{2.5} emissions from non-major stationary sources constitute a de minimis impact on the ambient level of PM_{2.5} in the Nevada Division of Environmental Protection's jurisdiction, and, therefore, individual source impact analyses for PM_{2.5} are not required.*

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, 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: *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 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 level of the annual nitrogen dioxide 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 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.

Section 2. NAC 445B.308 is hereby amended to read as follows:

445B.308 Prerequisites and conditions for issuance of certain operating permits; compliance with applicable state implementation plan.

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. 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. 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. 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. 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.