

Workshop to Solicit Comments
on Proposed Amendments to
NAC 445B.22097 and 445B.311

March 20, 2014

Overview:

National Ambient Air Quality Standards

- Under the Clean Air Act (CAA), EPA must review the standards for each criteria pollutant every 5 years.
- Criteria pollutants: CO, Pb, NO₂, SO₂, PM, O₃.
- EPA must tighten standards if necessary to be protective of public health & welfare.
- EPA is not allowed to consider cost when setting standards.

Overview:

State Implementation of Federal Standards

- CAA contemplates that States will implement these federal air pollution standards.
- States must submit a State Implementation Program (SIP) to implement the standards. Otherwise, EPA will implement them.
- State regulation/implementation cannot be less stringent than federal law.

Latest Standards that NDEP Must Implement

(New) pollutant standards that NDEP is required to implement:

- 2006 PM_{2.5} (24-hr & annual)
- 2010 NO₂ (1-hr)
- 2010 SO₂ (1-hr)

Current Federal Standards (NAAQS)

Pollutant		Primary/ Secondary	Averaging Time	Level	Form
Carbon Monoxide [76 FR 54294, Aug 31, 2011]		primary	8-hour	9 ppm	Not to be exceeded more than once per year
			1-hour	35 ppm	
Lead [73 FR 66964, Nov 12, 2008]		primary and secondary	Rolling 3 month average	0.15 µg/m3	Not to be exceeded
Nitrogen Dioxide [75 FR 6474, Feb 9, 2010]		primary	1-hour	100 ppb	98th percentile, averaged over 3 years
[61 FR 52852, Oct 8, 1996]		primary and secondary	Annual	53 ppb	Annual Mean
Ozone [73 FR 16436, Mar 27, 2008]		primary and secondary			
		secondary	8-hour	0.075 ppm	Annual fourth-highest daily maximum 8-hr concentration, averaged over 3 years
Particle Pollution 14-Dec-12	PM2.5	primary	Annual	12 µg/m3	annual mean, averaged over 3 years
		secondary	Annual	15 µg/m3	annual mean, averaged over 3 years
		primary and secondary	24-hour	35 µg/m3	98th percentile, averaged over 3 years
	PM10	primary and secondary	24-hour	150 µg/m3	Not to be exceeded more than once per year on average over 3 years
Sulfur Dioxide [75 FR 35520, Jun 22, 2010]		primary	1-hour	75 ppb (4)	99th percentile of 1-hour daily maximum concentrations, averaged over 3 years
[38 FR 25678, Sept 14, 1973]		secondary	3-hour	0.5 ppm	Not to be exceeded more than once per year

“Minor New Source Review”

- Minor NSR is for pollutants from stationary sources that do not require Prevention of Significant Deterioration (PSD) or nonattainment NSR permits.
- The purpose of minor NSR permits is to prevent the construction of sources that would interfere with attainment or maintenance of a National Ambient Air Quality Standard (NAAQS) or violate the control strategy in nonattainment areas. Also, minor NSR permits often contain permit conditions to limit the sources' emissions to avoid PSD.
- States are able to customize the requirements of the minor NSR program as long as their program meets minimum requirements. The permit agency's minor NSR program is part of the State Implementation Plan (SIP).

State Regulatory Revisions

- EPA requires that SIP revisions have corresponding regulatory authority in State regulation. For Nevada, this is NAC 445B.
 - Update SIP == Update NAC 445B
- Each plan must set forth legally enforceable procedures that enable the State to determine whether the construction or modification of a facility, building, structure or installation, or combination of these will result in interference with attainment or maintenance of a national standard in the State in which the proposed source (or modification) is located or in a neighboring State. (40 CFR 51.160(a))

Minimum Requirements

- Such procedures must include means by which the State or local agency responsible for final decision-making on an application for approval to construct or modify will prevent such construction or modification if it will interfere with the attainment or maintenance of a national standard. (40 CFR 51.160(b))
- “The procedures must discuss the air quality data and the dispersion or other air quality modeling used to meet the requirements of this subpart.
 - (1) All applications of air quality modeling involved in this subpart shall be based on the applicable models, data bases, and other requirements specified in appendix W.” (40 CFR 51.160(f))

Time Constraints and Possible Sanctions

- States have 3 years to implement a new standard after EPA promulgates it.
- If a State is late or deficient with implementation, EPA requires solution (“FIP”).
- State’s federal funds may be sanctioned (i.e., highway funding).
- State loses program approval and all permit activity must go directly through EPA (EPA Region 9 in San Francisco).
- NDEP is under an accelerated timeline by which it must submit SIP to EPA. “FIP clock” expires October 2014.

History of Proposed Revisions

- Took “universal model” and “discretion model” to EPA; EPA said they failed to meet CFR requirements.
- Stakeholder meeting on November 6, 2013
- Workshop on November 26, 2013
- Received several comments. This revision and workshop is in response to those comments.

Current NAC Implementation

- **NAC 445B.308:** For new or modified source, applicant must submit environmental evaluation for Director to determine attainment of NAAQS.
- **NAC 445B.310:** Applicant for new or revised permit must submit with the application an environmental evaluation if
 - ❑ New project > 25 tpy PTE of a reg. pollutant
 - ❑ Modification, if existing source has PTE > 25 TPY for a reg. pollutant or if modification has PTE > 10 TPY for a reg. pollutant.

Current NAC Implementation

- NAC 445B.311: Contents of Environmental Evaluation.
 - Eval for new or modified source must contain... “a dispersion analysis of each regulated air pollutant.”
- NAC 445B.22097: Standards of Quality for Ambient Air.
 - Director shall use Nevada Standards in considering whether to issue a permit.

Proposed Revisions to NAC 445B.22097

- **Adds to the Nevada side of the table:**
 - ❑ 1-hour Nitrogen Dioxide standard
 - ❑ 1-hour Sulfur Dioxide standard
 - ❑ Annual mean and 24-hour standard for PM_{2.5}
- **Adds language to ensure the new standards are no more stringent than the federal standards.**
 - ❑ “...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.”
- **Clarifies how measurements of PM_{2.5} and Lead are to be made.**

Proposed Revision to NAC 445B.311

- Adds a section that exempts applicant from providing air model for 1-hour SO₂ or 1-hour NO₂ if PTEs are less than 40 tons per year for new source or modification of source.

Who may be impacted ?

- Case by case review required to know for certain.
- $\text{PM}_{2.5}$ – Standard not exceeded unless large bio or oil combustion. Would typically be a major stationary source (PSD) for other criteria pollutants first.
- 1-hr SO_2 – a challenge for large coal and oil combusting units (like power plants).
- 1-hr NO_2 – a challenge for older, large diesel generators (low stack height with poor dispersion characteristics).
- Facilities with permit emission limits (PTE) much higher than actual emissions.

Solutions

- Facilities should re-run environmental models.
 - May already meet the standards.
- If permit limits exceed the standards, consider re-adjusting permit limits to avoid adding new pollution controls.
 - Many permit limits are much higher than actual emissions.
 - Remove emissions PTE that you do not use/need.
- Tighter standards may require tighter operation methods and/or pollution controls.
 - State can assist with review of permit and options.

Questions and Comments?

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