

# Proposed Regulation Order

## Proposed Amendments to Regulations for the State Ambient Air Quality Standard for Nitrogen Dioxide

Note: Language to be added is underlined and language to be removed is shown in ~~strikeout~~. Asterisks (\*\*\*\*) indicate that a portion of the regulation not being amended is not shown here. In section 70200, Table of Standards, no changes are proposed to standards for any substances not listed.

Amend sections 70100.1 and 70200 (Table of Standards) of title 17, California Code of Regulation, to read as follows:

### Division 3. Air Resources Board

#### Chapter 1. Air Resources Board

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#### Subchapter 1.5. Air Basins and Air Quality Standards

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#### Article 2. Ambient Air Quality Standards

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#### § 70100.1. Methods, Samplers, and Instruments for Measuring Pollutants

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(d) *NO<sub>2</sub> Methods.* The method for determining compliance with the NO<sub>2</sub> ambient air quality standard shall be the chemiluminescence Federal Reference Method for the determination of NO<sub>2</sub> in the atmosphere (40 CFR, Part 50, Appendix F- Measurement). California Approved Samplers for NO<sub>2</sub> are set forth in the Air Monitoring Quality Assurance Manual, Volume IV, Part D: Monitoring Methods for NO<sub>2</sub> as adopted on [Insert date of adoption]. Samplers, methods, or instruments determined in writing by the Air Resources Board or the Executive Officer to produce equivalent results for NO<sub>2</sub> shall also be California Approved Samplers for NO<sub>2</sub>.

Authority cited: Sections 39600, 39601 and 39606, Health and Safety Code. Reference: Sections 39014, 39606, 39701 and 39703(f), Health and Safety Code.

## Section 70200. Table of Standards \*\*\*

Substance	Concentration and Methods*	Duration of Averaging Periods	Most Relevant Effects	Comments
Nitrogen Dioxide	0.25 <del>18</del> ppm	1 hour	<p><u>a Short-term exposures may lead to adverse health effects in asthmatics: increased airway reactivity and enhanced allergic response after allergen challenge.</u></p> <p><del>(1). Potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups.</del></p> <p><del>a (2). Risk to public health implied by pulmonary and extra-pulmonary biochemical and cellular changes and pulmonary structural changes, which are observed in short-term animal tests at or above concentration of the standard.</del></p> <p>b. Contribution to atmospheric discoloration.</p>	<p>a. The <u>Both</u> standards <u>is are</u> intended to prevent adverse health effects.</p> <p>b. The <u>1 hour</u> standard imposes an upper limit on adverse effects on welfare, including atmospheric discoloration by NO<sub>2</sub>.</p>
	0.030 ppm	Annual	<p><u>Longer term exposures may lead to increased respiratory symptoms and medication use in asthmatics, emergency room visits for asthma in children, hospitalization for respiratory and cardiovascular disease, and premature mortality. Longer term exposures may also lead to changes in lung function growth in children, symptoms in asthmatic children, and pre-term birth. Children may be more susceptible to the potential effects of nitrogen dioxide on the developing lung.</u></p>	
	Gas Phase Chemiluminescence**			

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\*Any equivalent procedure which can be shown to the satisfaction of the Air Resources Board to give equivalent results at or near the level of the air quality standard may be used.

\*\*These standards are violated when concentrations exceed those set forth in the body of the regulation. All other standards are violated when concentrations equal or exceed those set forth in the body of the regulation.

\*\*\*Applicable statewide unless otherwise noted.

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NOTE: Authority cited: Sections 39600, 39601(a) and 39606(b), Health and Safety Code.

Reference: Sections 39014, 39606(b), 39701 and 39703(f), Health and Safety Code.