



Issues and Policies

AIR QUALITY

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Air quality is viewed as such an important factor in the quality of life that its measurements are used as a major factor in evaluating the Plan's performance.

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– RCIP Vision

Six criteria air pollutants have been established for every air basin within the State of California. These are pollutants for which acceptable levels of exposure can be determined and for which an ambient air quality standard has been set. As shown in Table AQ-1, Ambient Air Quality Standards, federal and state standards have been developed for ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide and PM₁₀. Federal primary standards for air pollutants have been established to protect the public health, while secondary standards protect the public welfare by preventing impairment of visibility and damage to vegetation and property.

**Table AQ-1
Ambient Air Quality Standards**

Pollutant	Averaging Time	State	Federal	
			Primary	Secondary
Ozone	1 Hour	0.09 ppm	0.12 ppm	Same as Primary Standard
	8 Hour	0.08 ppm	0.08 ppm	
Nitrogen Dioxide	Annual Average	0.053 ppm	0.053 ppm	Same as Primary Standard
	1 Hour	0.25 ppm	–	
Carbon Monoxide	8 Hour	9.0 ppm	9.0 ppm	–
	1 Hour	20.0 ppm	35.0 ppm	–
Suspended Particulate Matter (PM ₁₀ & PM _{2.5})	Annual Geometric Mean	30 µg/m ³	65 µg/m ³ (PM _{2.5})	–
	24 Hour	50 µg/m ³	150 µg/m ³ (PM ₁₀) 15 µg/m ³ (PM _{2.5})	Same as Primary Standard
	Annual Arithmetic Mean	--	50 µg/m ³	
Sulfur Dioxide	Annual Average	--	0.03 ppm	Same as Primary Standard
	24 Hour	0.04 ppm	0.14 ppm	
	3 Hour	--	--	0.5 ppm
	1 Hour	0.25 ppm	–	–
Lead	30 Day Average	1.5 µg/m ³	--	--
	Calendar Quarter	--	1.5 µg/m ³	Same as Primary Standard

Notes: ppm = parts per million; µg/m³ = micrograms per cubic meter of air
Source: California Air Resources Board Fact Sheet 39, 1998.



Riverside County has made great strides in achieving state and federal air quality standards. The following provides a description of the six criteria air pollutants and their attainment status in each of the three Riverside County air basins.

Ozone

Ozone is a pungent, colorless gas typical of southern California smog. Elevated ozone concentrations result in reduced lung function, particularly during vigorous physical activity. Ozone levels peak during the summer and early fall months.

The SOCAB is designated as a non-attainment area for both federal and state ozone standards, meaning that air quality standards are being exceeded. The Environmental Protection Agency (EPA) has classified the entire Southern California Association of Governments region as an “extreme” non-attainment area, and has mandated that the South Coast Air Quality Basin achieve attainment by 2010. The SSAB and MDAB are both designated as non-attainment areas for federal and state ozone standards.

Carbon Monoxide

Carbon monoxide (CO) is formed by the incomplete combustion of fossil fuels, almost entirely from automobiles. It is a colorless, odorless gas that can cause dizziness, fatigue and impairments to central nervous system functions.

The SOCAB is designated as a non-attainment area for federal CO standards. However, the Riverside County area of SOCAB has not exceeded either federal or state CO standards in the past five years. The SSAB and MDAB have both been designated as attainment areas for federal and state Carbon Monoxide standards.

Nitrogen Oxides

Nitrogen dioxide (NO₂), a reddish brown gas, and nitric oxide (NO), a colorless odorless gas, are jointly referred to as nitrogen oxides or NO_x. NO_x is a primary component of smog and also contributes to other pollution problems such as high concentration of fine particulate matter, poor visibility, and acid deposition. NO₂ decreases lung function and may reduce resistance to infection.

The SOCAB has not exceeded either federal or state standards for nitrogen dioxides in the past five years. It is designated as a maintenance area (an area that was once classified as non-attainment but has recently shown achievement of air quality standards) under federal standards and as an attainment area under state standards. The SSAB and MDAB are designated as attainment areas for both federal and state NO₂ standards.

Sulfur Dioxide

Sulfur dioxide (SO₂) is a colorless irritating gas created mainly by industrial facilities. SO₂ irritates the respiratory tract, injures lung tissue when combined with fine particulate matter and reduces visibility and the level of sunlight.

The SOCAB, SSAB and MDAB are all designated as attainment areas for both federal and state sulfur dioxide standards.