

AIR QUALITY REGULATIONS: FACT SHEET FOR LOS ANGELES COUNTY



I. BACKGROUND

Air pollutants can be harmful to health in both the short and long term, potentially contributing to irreversible chronic diseases and premature death¹. Generally, children, pregnant people, older adults, and those with pre-existing heart and lung diseases are more at risk of health problems caused by air pollution². In addition, data show that low-income communities and communities of color are disproportionately exposed to air pollution and, on average, face a greater risk of health impacts³.



Sources of air pollution can be natural, such as wildfires and dust storms, or human-made, such as motor vehicles and industrial facilities. Air quality regulations focus primarily on setting limits for pollution from human-made sources, while air quality management plans also consider natural events to help protect the air we breathe.

Air pollution is generally separated into two main categories: indoor and outdoor (ambient).

Sources of outdoor air pollution are classified as either mobile sources (e.g., cars, trucks, ships, and construction equipment) or stationary sources (e.g., power plants, oil refineries, and manufacturing facilities).

While the air quality in the Los Angeles region has improved over the last several decades, the most recent report from the American Lung Association assigns multiple failing grades for unhealthy levels of air pollution, including ranking Los Angeles as the worst area in the nation for a certain type of air pollution called ozone pollution in 2024⁴.

This fact sheet provides an overview of how outdoor, or ambient, air quality is regulated at the national, state, and local levels. Since air quality regulations are complex and continue to be developed and updated, this fact sheet is designed as a starting point for stakeholders in Los Angeles County to learn more about these topics. Links to resources for additional information are also included.

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publichealth.lacounty.gov/oeljch/





II. HOW IS AIR QUALITY REGULATED?

Who regulates air quality at the federal level?

- The U.S. Environmental Protection Agency (EPA) sets national ambient air quality standards and establishes federal emission standards for many stationary sources, such as chemical plants and factories, as well as for certain mobile sources, including cars, trucks, planes, and trains.⁵
- Under the Clean Air Act, the EPA sets national ambient air quality standards for what are known as “criteria pollutants” and establishes emission standards for hazardous (toxic) air pollutants⁶. Criteria air pollutants are six common air pollutants that can cause health and environmental problems: ozone, particulate matter, carbon monoxide, lead, nitrogen dioxide, and sulfur dioxide⁷.

Does the federal government enforce air quality regulations?

- The EPA has enforcement authority, but in most cases, day-to-day enforcement is carried out by state and local agencies. The EPA’s role is primarily oversight and includes audits, inspections, and taking action in cases of major violations. While the EPA creates national standards, states are responsible for developing plans to meet these standards, including for industrial facilities⁸. The EPA also works with national, state, and tribal governments to conduct inspections and record reviews to verify that “regulated communities” are following applicable clean air regulations⁹.

What is the authority to regulate air quality at the state level?

- While the Clean Air Act sets national standards, the EPA delegates implementation to state, local, and tribal governments¹⁰. The California Air Resources Board (CARB) is the state agency that supervises air pollution emissions throughout California¹¹.
- CARB criteria pollutant ambient air quality standards are stricter than the EPA’s national standards¹². This is to address the state’s individual air quality challenges¹³.
- CARB also supervises local air districts and ensures that their ambient air quality plans comply with state and national standards^{14 15}.

Does the state government enforce air quality regulations?

- CARB enforces air quality emissions standards relating to “consumer products, fuels, area-wide” sources, and mobile sources of air pollution. This is done through inspections, data review, and surveillance, and legal action¹⁶.





Who regulates air quality at the local level?

- In California, Air Quality Management Districts (AQMDs) and Air Pollution Control Districts (APCDs) are the primary local agencies responsible for regulating air quality. There are 35 districts statewide (California Air Districts).
- The South Coast AQMD (SCAQMD), which covers much of Los Angeles County and parts of Orange, Riverside, and San Bernardino counties, develops local air quality rules, issues permits to stationary sources of air pollution, monitors air quality at 38 locations, and enforces compliance with state and federal standards¹⁷. Its permitting process considers national, state, and local air quality regulations for stationary sources, and its permits authorize the use of equipment to emit or control air pollutants¹⁸.
- The Antelope Valley Air Quality Management District (AVAQMD) is responsible for controlling stationary and other non-vehicular sources of air pollution throughout the Antelope Valley, and for ensuring that local sources comply with state and federal air quality requirements.
- Both South Coast AQMD and AVAQMD coordinate with the California Air Resources Board (CARB) and the U.S. Environmental Protection Agency (EPA) to implement and enforce air quality regulations and monitor emissions.

Do the local air districts enforce air quality regulations?

- Yes. SCAQMD enforces stationary source emission regulations with the goal of ensuring that ambient air quality complies with state and federal standards¹⁹. The AQMDs and APCDs have various systems to enforce air quality regulations, including the issuance of permits and penalties, as well as site inspections²⁰.

Where can I find more information?

- The EPA uses the Air Quality Index (AQI) to convey information about outdoor air quality and potential health impacts. Health and air quality information using the AQI can be viewed here:
<http://publichealth.lacounty.gov/eh/safety/air-pollution.htm>
- Air quality alerts:
<https://www.aqmd.gov/home/air-quality/air-alerts>
- How to report an air pollution issue:
<http://ph.lacounty.gov/eh/docs/about/how-to-report-environmental-issue-unincorporated-area-lac.pdf>
- South Coast AQMD map of monitoring locations:
<https://www.aqmd.gov/docs/default-source/default-document-library/map-of-monitoring-areas.pdf>
- How to sign up for alerts, report air quality issues, and view real-time air quality information on the South Coast AQMD app: [click here](#).



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