



BAY AREA AIR QUALITY
MANAGEMENT DISTRICT

California Environmental Quality Act
Air Quality Guidelines
Appendix F: Glossary

These guidelines are nonbinding recommendations, intended to assist lead agencies with navigating the CEQA process. They may be updated as needed in the future, and any updates will likewise be nonbinding and advisory.



Aerosol – Particle of solid or liquid matter that typically remain suspended in the air from a few hours to several weeks depending on the particle size and weight.

Area Sources – Sources of air pollutants that individually emit relatively small quantities of air pollutants but that may emit considerable quantities of emissions when aggregated over a large area. Examples include water heaters, lawn maintenance equipment, and consumer products.

Bay Area Air Quality Management District (Air District) – A regional air pollution control agency with jurisdiction over the nine counties that surround San Francisco Bay (not including northeastern Solano County and northern Sonoma County).

Best Available Control Technology (BACT) – The most stringent requirements for new or modified emission sources. An emissions limitation based on using the most up-to-date methods, systems, techniques, and production processes available to achieve the greatest feasible emission reduction.

Best Management Practice (BMP) – A measure that reduces emissions and therefore reduces health risks from air pollution. Examples include retrofitting diesel generators to low- or zero-emitting technology, electrifying loading docks, limiting truck idling times, requiring low- to zero-emitting truck engines, and adding abatement devices to stationary sources.

California Air Resources Board (CARB) – The State of California agency responsible for air pollution control. Responsibilities include establishing state ambient air quality standards, setting allowable emission levels for motor vehicles in California, and providing oversight of local air quality management districts.

California Clean Air Act (CCAA) – Legislation enacted in 1988 that provides the basis for air quality planning and regulation independent of federal regulations. A major element of the act is the requirement that local

air districts in violation of the California ambient air quality standards prepare attainment plans that identify air quality problems, causes, trends, and actions to be taken to attain and maintain California's air quality standards by the earliest practicable date.

California Emissions Estimator Model (CalEEMod) – A statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and greenhouse gas emissions associated with both construction and operations from a variety of land use projects.

California Environmental Quality Act (CEQA) – Legislation requiring state and local agencies to disclose the significant environmental impacts of a project through the preparation of an initial study, a negative declaration, or an environmental impact report and to identify actions to mitigate any significant environmental project impacts.

Carbon Dioxide (CO₂) – A colorless, odorless gas that occurs naturally in the Earth's atmosphere. Significant quantities are also emitted into the air by fossil fuel combustion.

Carbon Dioxide Equivalent (CO₂e) – The amount of carbon dioxide by weight that would produce the same global warming impact as a given weight of another greenhouse gas, based on the best available science, including from the Intergovernmental Panel on Climate Change.

Carbon Monoxide (CO) – A colorless, odorless, invisible, flammable gas that can be dangerous to human health in high concentrations, especially indoors where there is little ventilation.

Carbon Neutrality – The point at which the removal of carbon pollution from the atmosphere meets or exceeds carbon emissions. For the purposes of California's Climate Change Scoping Plan, "carbon neutrality" refers to the state achieved when carbon dioxide and other greenhouse gas emissions generated by sources such as transportation, power plants, and industrial processes are less than or equal to the amount of carbon dioxide that is stored, both in natural sinks and mechanical sequestration.

Chlorofluorocarbons (CFCs) – A family of inert, nontoxic, and easily liquefied chemicals used in refrigeration, air conditioning, packaging, and insulation or as a solvent or aerosol propellant. CFCs drift into the upper atmosphere, where their chlorine components destroy stratospheric ozone.

Clean Air Act (CAA) – Long-standing federal legislation, last amended in 1990, that is the legal basis for national clean air programs.

Conformity – A requirement in federal law and administrative practice that projects will not be approved if they do not conform with the State Implementation Plan because they would cause or contribute to an increase in air pollutant emissions, violate an air pollutant standard, or increase the frequency of violations of an air pollutant standard.

Criteria Air Pollutants – Pollutants for which the National ambient air quality standards and the California ambient air quality standards have been established. Criteria air pollutants include ground-level ozone, particulate matter (PM), carbon monoxide (CO), sulfur dioxide (SO₂), nitrogen dioxide (NO₂), and lead.

Design Element – The features, prerequisites, and measures that must be incorporated into a land use project for the impacts from greenhouse gas emissions to be considered less than significant for California Environmental Quality Act purposes.

Emission FACtors (EMFAC) (Model) – A California Air Resources Board computer model developed to assess emissions from on-road motor vehicles, including cars, trucks, and buses in California.

Emission Factor – For stationary sources, the relationship between the amount of a pollution produced and the amount of raw material processed or burned. For mobile sources, the relationship between the amount of pollution produced and the number of vehicles miles traveled. By using the emission factor of a pollutant and specific data regarding quantities of materials used by a given source, it is possible to compute emissions for the source.

Emission Inventory – An estimate of the amount of pollutants emitted into the atmosphere from major mobile, stationary, areawide, and natural sources over a specific period, such as a day or a year.

EV – Electric vehicle.

EV Capable – According to California’s Green Building Standards Code, EV-capable infrastructure includes the “raceway” (the enclosed conduit that forms the physical pathway for electrical wiring to protect it from damage) and panel capacity to support future installation of a dedicated 208/240 VAC, 40-amp branch circuit and charging station(s).

EV Ready – According to California’s Green Building Standards Code, EV-ready building standards require installation of dedicated 208/240 VAC, 40-amp branch circuits, circuit breakers, and other electrical components, including a receptacle or blank cover needed to support future installation of one or more charging stations.

EVSE – Electric vehicle supply equipment (e.g., chargers).

Exposure – When a receptor comes in contact with one or more contaminants and the magnitude of the exposure is defined as the amount of contaminant(s) that is either ingested, inhaled, or absorbed during a specified time period. **Gasoline-Dispensing Facility (GDF)** – Retail service station or private facility that stores and/or dispenses gasoline into fuel tanks.

Global Warming Potential (GWP) – The ratio of radiative forcing that would result from the emission of 1 kilogram of a greenhouse gas to that from the emission of 1 kilogram of carbon dioxide over a fixed period.

Greenhouse Gas (GHG) – Any gas that absorbs infrared radiation in the atmosphere. Greenhouse gases include water vapor, carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), halogenated fluorocarbons (HCFCs), ozone (O₃), perfluorocarbons (PFCs), sulfur hexafluoride (SF₆), and hydrofluorocarbons (HFCs).

Hazardous Air Pollutants – Federal terminology for air pollutants that are not covered by ambient air quality standards but may reasonably be expected to cause or contribute to serious illness or death (see “National Emissions Standards for Hazardous Air Pollutants (NESHAPs),” below).

Health Risk Assessment (HRA) – A detailed comprehensive analysis to evaluate and predict the dispersion of hazardous substances in the environment and the potential for exposure of human populations, and to assess and quantify both the individual and the population-wide health risks associated with those levels of exposure.

High Efficiency Particulate Air Filter (HEPA Filter) – An air filter capable of filtering 0.3-micron particles with 99.97-percent efficiency.

Hydrogen Sulfide (H₂S) – A gas characterized by its “rotten egg” smell, found in the vicinity of oil refineries, chemical plants, sewage treatment plants, and wetlands.

Indirect Sources – Land uses and facilities that attract or generate motor vehicle trips (e.g., shopping centers, office buildings, and airports) and thus result in air pollutant emissions.

Inversion – The phenomenon of a layer of warm air over cooler air. This atmospheric condition resists the natural dispersion and dilution of air pollutants.

Mobile Source – Any motor vehicle that produces air pollution. Cars, trucks, and motorcycles are on-road mobile sources, and airplanes, trains, and construction equipment are off-road mobile sources.

National Ambient Air Quality Standards (NAAQS) – The Clean Air Act requires the U.S. Environmental Protection Agency to set NAAQS for criteria air pollutants at levels determined to be protective of public health.

National Emissions Standards for Hazardous Air Pollutants (NESHAPs) – Emissions standards set by the U.S. Environmental Protection Agency for hazardous air pollutants that may cause an increase in deaths or in serious, irreversible, or incapacitating illness.

Nitrogen Oxides (NO_x) – Gases formed in great part from atmospheric nitrogen and oxygen when combustion takes place under conditions of high temperature and high pressure. NO_x is a precursor to the criteria air pollutant ozone.

Nonattainment Area – Defined geographic area that does not meet one or more of the ambient air quality standards for the criteria pollutants designated in the federal Clean Air Act or the California Clean Air Act.

Overburdened Communities – Effective July 1, 2022, Air District permit regulations set more stringent health risk limits and public noticing requirements for projects located in overburdened communities, defined in *Regulation 2-1-243* as census tracts that score at or above the 70th percentile in CalEnviroScreen 4.0, and areas within 1,000 feet of the boundaries of those census tracts.¹

Ozone (O₃) – A pungent, colorless, toxic gas. A product of complex photochemical processes in the presence of sunlight. Tropospheric (lower atmosphere) ozone is a criteria air pollutant.

Particulate Matter with an Aerodynamic Diameter Less Than or Equal to 2.5 micrometers (PM_{2.5}) – Individual particles of this size are small enough to be inhaled deeply into the lungs.

Particulate Matter with an Aerodynamic Diameter Less Than or Equal to 10 micrometers (PM₁₀) – The small size of these particles allows them to make their way to the air sacs deep within the lungs, where they may be deposited and result in adverse health effects.

¹ BAAQMD. *Regulation 2 Rule 5: New Source Review of Toxic Air Contaminants - 2021 Amendment (Current)*
https://www.baaqmd.gov/rules-and-compliance/rules/reg-2-rule-5-new-source-review-of-toxic-air-contaminants?rule_version=2021%20Amendment.

Photochemical Process – The process, which involves chemical changes, brought about by the radiant energy of the sun acting upon various polluting substances. The products of this process are known as photochemical smog.

Precursor – Compounds that change chemically or physically after being emitted into the air and eventually produce air pollutants. For example, many organic compounds are precursors to ozone.

Prevention of Significant Deterioration (PSD) – A U.S. Environmental Protection Agency program in which state and/or federal permits are required that are intended to restrict emissions for new or modified sources in places where air quality is already better than required to meet primary and secondary ambient air quality standards.

Reactive Organic Gases (ROG) – Classes of organic compounds, especially olefins, substituted aromatics, and aldehydes, that react in the atmosphere to form photochemical smog or ozone.

Sensitive Receptors – Facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples include schools, hospitals, and residential areas.

State Implementation Plan (SIP) – A plan prepared by states and submitted to the U.S. Environmental Protection Agency describing how each area will attain and maintain national ambient air quality standards.

Stationary Source of Air Pollution – A fixed, nonmobile producer of pollution, usually found at industrial or commercial facilities.

Sulfur Oxides (SO_x) – Pungent, colorless gases formed primarily by the combustion of sulfur-containing fossil fuels, especially coal and oil. Considered a criteria air pollutant, sulfur oxides may damage the respiratory tract, as well as vegetation.

Threshold of Significance – A quantitative or qualitative standard that can be used to define the level of effect above which a lead agency considers an air impact to be significant.

Toxic Air Contaminants (TACs) – TACs are air pollutants, identified by the California Air Resources Board, that may cause or contribute to an increase in deaths or in serious illness, or that may pose a present or potential health hazard. Health effects may occur at extremely low levels of TACs.

Transportation Control Measures (TCMs) – Measures to reduce vehicle use and thereby reduce traffic congestion and decrease emissions from motor vehicles.

U.S. Environmental Protection Agency (EPA) – The federal agency responsible for controlling air and water pollution, toxic substances, solid waste, and cleanup of contaminated sites.

Vehicle Miles Traveled (VMT) – A metric of the total miles traveled by vehicles in a defined area over a defined period. It is often used to estimate the environmental impacts of driving.

Zero-Emission Vehicle – Vehicle that produces no exhaust emissions from the on-board source of power (e.g., a fully electric vehicle). These vehicles still produce emissions from tire and brake wear and can contribute to re-entrained road dust.

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