

Glossary

Area Sources	Sources of pollution where the emissions are spread over a wide area, such as consumer products, fireplaces, road dust and farming operations. Area-wide sources do not include mobile sources or stationary sources.
Air	So called "pure" air is a mixture of gases containing about 78 percent nitrogen; 21 percent oxygen; less than 1 percent of carbon dioxide, argon, and other gases; and varying amounts of water vapor. See also ambient air.
Air Monitoring	Sampling for and measuring of pollutants present in the atmosphere.
Air Pollutants	Amounts of foreign and/or natural substances occurring in the atmosphere that may result in adverse effects to humans, animals, vegetation, and/or materials. (See also air pollution.)
Air Pollution	Degradation of air quality resulting from unwanted chemicals or other materials occurring in the air. (See also air pollutants.)
Air Quality Index (AQI)	A numerical index used for reporting severity of air pollution levels to the public. It replaces the formerly used Pollutant Standards Index (PSI). Like the PSI, the AQI incorporates five criteria pollutants -- ozone, particulate matter, carbon monoxide, sulfur dioxide, and nitrogen dioxide -- into a single index. The new index also incorporates the 8-hour ozone standard and the 24-hour PM2.5 standard into the index calculation. AQI levels range from 0 (Good air quality) to 500 (Hazardous air quality). The higher the index, the higher the level of pollutants and the greater the likelihood of health effects. The AQI incorporates an additional index category -- unhealthy for sensitive groups -- that ranges from 101 to 150. In addition, the AQI comes with more detailed cautions.
Ambient Air	The air occurring at a particular time and place outside of structures. Often used interchangeably with "outdoor air." (See also air.)
Clean Air Act (CAA) 1972, 1990	Allows United States Environmental Protection Agency (USEPA) to set national emission and ambient air quality standards. The 1990 Amendments instituted pollution credits trading and linked transportation planning with air quality planning.
Clean Air Interstate Rule (CAIR)	CAIR will permanently cap emissions of sulfur dioxide (SO ₂) and nitrogen oxides (NO _x) in the eastern United States. CAIR achieves large reductions of SO ₂ and/or NO _x emissions across 28 eastern states and the District of Columbia. When fully implemented, CAIR will reduce SO ₂ emissions in these states by over 70 percent and NO _x emissions by over 60 percent from 2003 levels. EPA issued the Clean Air Interstate Rule (CAIR) on March 10, 2005.

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Criteria Air Pollutant	An air pollutant for which acceptable levels of exposure can be determined and for which an ambient air quality standard has been set. Examples include: ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, and PM10 and PM2.5. The term "criteria air pollutants" derives from the requirement that the U.S. EPA must describe the characteristics and potential health and welfare effects of these pollutants.
Emission Inventory	An estimate of the amount of pollutants emitted into the atmosphere from major mobile, stationary, area-wide, and natural source categories over a specific period of time such as a day or a year.
Emission Offsets	(also known as Emissions Trading): A rule-making concept whereby approval of a new or modified stationary source of air pollution is conditional on the reduction of emissions from other existing stationary sources of air pollution. These reductions are required in addition to reductions required by best available control technology.
Emission Rate	The weight of a pollutant emitted per unit of time (e.g., tons / year).
Emission Standard	The maximum amount of a pollutant that is allowed to be discharged from a polluting source such as an automobile or smoke stack.
Mobile Sources	Sources of air pollution such as automobiles, motorcycles, trucks, off-road vehicles, boats, and airplanes.
National Ambient Air Quality Standards (NAAQSs)	Standards established by the United States EPA that apply for outdoor air throughout the country. There are two types of NAAQS. Primary standards set limits to protect public health and secondary standards set limits to protect public welfare
Nitrogen Oxides (NO _x)	A general term pertaining to compounds of nitric oxide (NO), nitrogen dioxide (NO ₂) and other oxides of nitrogen. Nitrogen oxides are typically created during combustion processes, and are major contributors to smog formation and acid deposition. NO ₂ is a criteria air pollutant, and may result in numerous adverse health effects.
Nonattainment	A geographic area identified by the U.S. EPA as not meeting either NAAQS standards for a given pollutant
Non-Road Emissions	(Or also known as Off-Road) Pollutants emitted by a variety of non-road sources such as farm and construction equipment, gasoline-powered lawn and garden equipment, and power boats and outboard motors.
NO _x SIP Call	USEPA controls on coal-fired power plants across the eastern half of the United States, in addition to the Acid Rain Program and the CAIR rule, effective May 2004.

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Ohio Environmental Protection Agency (OEPA)	The state agency charged with setting policy and guidelines and carrying out legal mandates for the protection of statewide interests in environmental resources.
Ozone Precursor	Chemicals such as non-methane hydrocarbons and oxides of nitrogen (NO _x), occurring either naturally or as a result of human activities, which contribute to the formation of ozone, a major component of smog.
Particulate Matter (PM)	Any material, except pure water, that exists in the solid or liquid state in the atmosphere. The size of particulate matter can vary from coarse, wind-blown dust particles to fine particle combustion products.
PM ₁₀	A criteria air pollutant consisting of small particles with an aerodynamic diameter less than or equal to a nominal 10 microns (about 1/7 the diameter of a single human hair). Their small size 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. PM ₁₀ also causes visibility reduction.
PM _{2.5}	Includes tiny particles with an aerodynamic diameter less than or equal to a nominal 2.5 microns. This fraction of particulate matter penetrates most deeply into the lungs.
Point Source	(Or also known as Stationary Sources) Specific points of origin where pollutants are emitted into the atmosphere such as factory smokestacks. (See also Area Sources).
Sensitive Groups	Identifiable subsets of the general population that are at greater risk than the general population to the toxic effects of a specific air pollutant (e.g., infants, asthmatics, elderly).
Smog	A combination of smoke and other particulates, ozone, hydrocarbons, nitrogen oxides, and other chemically reactive compounds which, under certain conditions of weather and sunlight, may result in a murky brown haze that causes adverse health effects.
Source	Any place or object from which air pollutants are released. Sources that are fixed in space are stationary sources and sources that move are mobile sources.
State Implementation Plan (SIP)	A plan prepared by states and submitted to U.S. EPA describing how each area will attain and maintain national ambient air quality standards. SIPs include the technical foundation for understanding the air quality (e.g., emission inventories and air quality monitoring), control measures and strategies, and enforcement mechanisms.
Title V	A section of the 1990 amendments to the federal Clean Air Act that requires a federally enforceable operating permit for major sources of air pollution.
Transport	The movement of air pollution from one region to another.
Transportation Control	Any control measure to reduce vehicle trips, vehicle use, vehicle

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Measure (TCM)	miles traveled, vehicle idling, or traffic congestion for the purpose of reducing motor vehicle emissions. TCMs can include encouraging the use of carpools and mass transit.
United States Environmental Protection Agency (USEPA)	The federal agency charged with setting policy and guidelines, and carrying out legal mandates for the protection of national interests in environmental resources.
Vehicle Miles Traveled (VMT)	The miles traveled by motor vehicles over a specified length of time (e.g., daily, monthly or yearly) or over a specified road or transportation corridor.
Volatile Organic Compounds (VOCs)	Carbon-containing compounds that evaporate into the air (with a few exceptions). VOCs contribute to the formation of smog and / or may themselves be toxic. VOCs often have an odor, and some examples include gasoline, alcohol, and the solvents used in paints.