

APPENDIX G
GLOSSARY OF TERMS

Adverse Health Effects [Glossary]¹: A health effect from exposure to air contaminants that may range from relatively mild temporary condition, such as eye or throat irritation, shortness of breath, or headaches to permanent and serious conditions, such as birth defects, cancer or damage to lungs, nerves, liver or other organs.

Air Dispersion Model/Air Quality Simulation Model [Glossary]: A mathematical relationship between emissions and air quality which simulates on a computer the transport, dispersion, and transformation of compounds emitted in the air.

Air Pollutants [Glossary]: Amounts of foreign and/or natural substances occurring in the atmosphere that may result in adverse effects to humans, animals, vegetation and/or materials.

Air Pollution Control District [Glossary]: A county agency with authority to regulate stationary, indirect and area source air pollution (e.g. power plants, highway construction, and housing developments) within a given county, and governed by a regional air pollution control board composed of the elected supervisors.

Air Quality Management District [Glossary]: A group of counties or portions of counties, or an individual county specified in law with authority to regulate stationary, indirect and area sources of air pollution within the region and governed by a regional air pollution control board comprised mostly of elected officials from within the region.

Ambient Air [Glossary]: The air occurring at a particular time and place outside a structure. Often used interchangeably with "outdoor air"

California Environmental Quality Act (CEQA) [CEQA Handbook]²: A state law intended to protect the environment of California. It is codified in sections 21000 through 21177 of the Public Resources Code.

Carcinogen [Glossary]: A cancer causing substance.

Commercial Vehicle: Any vehicle or combination of vehicles defined by the California Vehicle Code 15210(b) and any other with a gross vehicular weight rating (GVWR) of greater than 10,000 pounds.

Cost-effectiveness [Glossary]: The cost of an emissions control measure assessed in terms of dollars-per-pound, or dollars-per-ton of air emissions reduced.

¹ From the Air Resources Board's Glossary for Air Pollution Terms; available at <http://www.arb.ca.gov/html/gloss.htm>

² From the Air Resources Board's CEQA Review Handbook for Local Air Pollution Control Agencies, March 1990.

Criteria Pollutant [Glossary]: 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, PM10 and PM 2.5. The term "criteria air pollutants" derives from the requirements that the U.S. EPA must describe the characteristics and potential health and welfare effects of these pollutants. The U.S. EPA and ARB periodically review new scientific data and many propose revisions to the standards as a result.

Diesel Exhaust Particulate Matter (diesel PM) [Diesel Risk Reduction Plan]³: That portion of the exhaust from a diesel fueled compression ignition engine, which is collected via a particulate matter sampling method. Diesel PM consists of several constituents, including: an elemental carbon fraction, a soluble organic fraction, and a sulfate fraction. The majority of diesel PM (i.e., 98%) is smaller than 10 microns in diameter.

Driver: Any person who drives or is in actual physical control of a vehicle as defined in the California Vehicle Code section 305.

Emergency: A sudden, urgent, usually unforeseen, occurrence; or a foreseeable occurrence relative to a passenger's pre-disclosed medical or physiological condition.

Emission Factor [Glossary]: For stationary sources, the relationship between the amount of 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 vehicle 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. This approach is used in preparing an emissions inventory.

Emission Inventory [Glossary]: 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 year.

Emission Rate [Glossary]: The weight of a pollutant emitted per unit of time (e.g., tons/year).

Emission Standard [Glossary]: The maximum amount of a pollutant that is allowed to be discharged from a polluting source such as an automobile or a smokestack.

Environmental Impact Report (EIR) [CEQA Handbook]: An informational document used to inform public agency decision-makers and the public of the significant effects of a project. The EIR also identifies the possible ways to eliminate or minimize the significant effects and describes reasonable alternatives to the project.

³ From the Air Resources Board's *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles*, October 2000.

Environmental Justice [Glossary]: The fair treatment of people of all races and incomes with respect to development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment implies that no person or group of people should shoulder a disproportionate share of negative environmental and economic impacts resulting from the execution of environmental programs.

Epidemiology [Glossary]: The study of the occurrence and distribution of disease within a population.

Exposure [Glossary]: The concentration of the pollutant in the air multiplied by the population exposed to that concentration over a specified time period.

Exposure Assessment [Glossary]: Measurement or estimation of the magnitude, frequency, duration, and route of exposure to a substance for the population of interest.

Fuel Cell [Glossary]: An electrochemical cell that captures the electrical energy of a chemical reaction between fuels such as liquid hydrogen and liquid oxygen and converts it directly and continuously into the energy of a direct electrical current.

Gross vehicle weight rating: The weight specified by the manufacturer as the loaded weight of a single vehicle as defined in the California Vehicle Code Section 350.

Health Risk Assessment [Glossary]: A document that identifies the risks and quantities of possible adverse health effects that may result from exposure to emissions of toxic air contaminants. A health risk assessment cannot predict specific health effects; it only describes the increased possibility of adverse health effects based on the best scientific information available.

Heavy-duty Vehicle: For the purposes of this regulation, any commercial diesel-fueled vehicle with a gross vehicular weight rating greater than 14,000 pounds.

Idling: The vehicle engine is running at any location while the vehicle is stationary.

Morbidity [Glossary]: Rate of disease incidence.

Mortality [Glossary]: Death rate.

Mutagenic [Glossary]: The ability of a chemical or physical agent to produce heritable changes in DNA of living cells.

Nitrogen Oxides (NO_x) [Glossary]: A general term pertaining to compounds of nitric oxide (NO), nitrogen dioxide (NO₂) and other oxides of nitrogen. Nitrogen oxides are typically created during the combustion processes, and are major contributors to smog formation and acid deposition. NO₂ is a criteria air pollutant, and may result in numerous adverse health effects.

Noncarcinogenic Effects [Glossary]: Non-cancer health effects which may include birth defects, organ damage, morbidity, and death.

Office of Environmental Health Hazard Assessment (OEHHA) [Glossary]: A department within the California Environmental Protection Agency that is responsible for evaluating chemicals for adverse health impacts and establishing safe exposure levels. OEHHA also assists in performing health risk assessments and developing risk assessment procedures for air quality management purposes.

Official Traffic Control Device [VC §440]: Any sign, signal, marking, or device, consistent with section 21400 of the Vehicle Code, placed or erected by authority of a public body or official having jurisdiction, for the purpose of regulating, warning, or guiding traffic, but does not include islands, curbs, traffic barriers, speed humps, speed bumps, or other roadway design features.

Official Traffic Control Signal [VC §445]: Any device, whether manually, electrically, or mechanically operated, by which traffic is alternately directed to stop and proceed and which is erected by authority of a public body or official having jurisdiction.

Opacity [Glossary]: The amount of light obscured by particle pollution in the atmosphere. Opacity is used as an indicator of changes in performance of particulate control systems.

Ozone [Glossary]: A strong smelling, pale blue, reactive toxic chemical gas consisting of three oxygen atoms. It is a product of the photochemical process involving the sun's energy and ozone precursors, such as hydrocarbons and oxides of nitrogen. Ozone exists in the upper atmosphere ozone layer (stratospheric ozone) as well as at the earth's surface in the troposphere (ozone). Ozone in the troposphere causes numerous adverse health effects and is a criteria air pollutant. It is a major component of smog.

Primary diesel engine: The diesel-fueled engine used for vehicle propulsion.

Queuing: The intermittent starting and stopping of a vehicle while the driver, in the normal course of doing business, is actively waiting to perform work or a necessary service when shutting the vehicle engine off would impede the progress of the queue and is not practicable. Queuing does not include the time a driver may wait motionless in a line in anticipation of the start of or opening of a location where work or a necessary service will be performed.

Ringelmann Chart [Glossary]: A series of charts, numbered 0 to 5, that simulate various smoke densities by presenting different percentages of black. A Ringelmann No. 1 is equivalent to 20 percent black; a Ringelmann No. 5 is 100 percent black. They are used for measuring the opacity or equivalent obscuration of smoke arising from stacks and other sources by matching the actual effluent with the various numbers, or densities, indicated by the charts.

Rural Area [U.S. Census 2000]: The U.S. Census Bureau's classification of "rural" consists of all territory, population, and housing units located outside of urbanized areas and urban clusters. The rural component contains both place and nonplace territory. Geographic entities, such as census tracts, counties, metropolitan areas, and the territory outside metropolitan areas, often are "split" between urban and rural territory, and the population and housing units they contain often are partly classified as urban and partly classified as rural. (See also definition of "Urban Area")

Scientific Review Panel [Glossary]: Mandated by AB 1807, this nine-member panel advises the ARB, OEHHA, and the California Department of Pesticide Regulation on the scientific adequacy of the risk assessment portion of reports issued by those three agencies in the process of identifying substances as toxic air contaminants.

Sleeper berth: A securely fixed area properly equipped for sleeping located in the cab or immediately adjacent to the cab in full compliance with 49 CFR Ch. III (10-1-02 edition) section 393.77.

Toxic Air Contaminant [HSC §39655]: An air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health. A substance that is listed as a hazardous air pollutant pursuant to subsection (b) of section 112 of the federal act (42 U.S.C. Sec. 7412(b)) is a toxic air contaminant. A toxic air contaminant which is a pesticide shall be regulated in its pesticidal use by the Department of Pesticide Regulation pursuant to Article 1.5 (commencing with section 14021) of Chapter 3 of Division 7 of the Food and Agricultural Code.

Unit Risk Factor [Glossary]: The number of potential excess cancer cases from a lifetime exposure to one microgram per cubic meter (μ/m^3) of a given substance. For example, a unit risk value of 5.5×10^{-6} would indicate an estimated 5.5 cancer cases per million people exposed to an average concentration of $1 \mu/m^3$ of a specific carcinogen for 70 years.

Urban Area [U.S. Census 2000]: For Census 2000, the U.S. Census Bureau classifies as "urban" all territory, population, and housing units located within an urbanized area (UA) or an urban cluster (UC). It delineates UA and UC boundaries to encompass densely settled territory, which consists of: (a) core census block groups or blocks that have a population density of at least 1,000 people per square mile and (b) surrounding census blocks that have an overall density of at least 500 people per square mile. In addition, under certain conditions, less densely settled territory may be part of each UA or UC.