GLOSSARY OF TECHNICAL TERMS

Alquist-Priolo Special Studies Zones: The A-P Act requires the State Geologist (Chief of the Division of Mines and Geology) to delineate "Earthquake Fault Zones" along faults which are "sufficiently active" and "well-defined."

Ambient Air Pollutants / Criteria Pollutants: Pollutants for which acceptable levels of exposure can be determined and for which an ambient air quality standard has been set.

Attainment: A term used to describe an area considered to have air quality as good as or better than the national ambient air quality standards as defined in the Clean Air Act. An area may be an attainment area for one pollutant and a non-attainment area for others.

Batholiths: A massive discordant pluton with a surface area greater than 100 square kilometers, typically having a depth of about 30 kilometers. Batholiths are generally found in elongated mountain ranges after the country rock above them has eroded.

Climate Change (also referred to as 'global climate change'): The term 'climate change' is sometimes used to refer to all forms of climatic inconsistency, but because the Earth's climate is never static, the term is more properly used to imply a significant change from one climatic condition to another. In some cases, 'climate change' has been used synonymously with the term, 'global warming'; scientists however, tend to use the term in the wider sense to also include natural changes in climate.

Climate Change: A change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods.

Erosion: The wearing away of land surface by wind or water, intensified by land-clearing practices related to farming, residential or industrial development, road building, or logging.

Fault: Cracks in the earth's crust.

Granite: A pink-colored, felsic, plutonic rock that contains potassium and usually sodium feldspars, and has a quartz content of about 10%. Granite is commonly found on continents but virtually absent from the ocean basins.

Granodiorite: A rock roughly equivalent to granite, which is formed deep within the earth at high temperatures and pressures. It is a common rock type in the higher elevations of the Sierra Nevada and becomes crumbly as it erodes.

Great Valley: Bounded by the Cascade Range to the north, the Sierra Nevada to the east, the Tehachapi Mountains to the south, and the Coast Ranges and San Francisco Bay to the west, the valley is a vast agricultural region drained by the Sacramento and San Joaquin rivers.

Greenhouse Effect: The warming of the Earth's atmosphere attributed to a buildup of carbon dioxide or other gases; some scientists think that this build-up allows the sun's rays to heat the Earth, while making the infra-red radiation atmosphere opaque to infra-red radiation, thereby preventing a counterbalancing loss of heat.

Greenhouse Gas: A gas, such as water vapor, carbon dioxide, methane, chlorofluorocarbons (CFCs) and hydro chlorofluorocarbons (HCFCs), that absorbs and re-emits infrared radiation, warming the earth's surface and contributing to climate change (UNEP, 1998).

Igneous Rock: Formed when molten rock (called lava or magma) cools and hardens. Granite is an example of an igneous rock.

Liquefaction: Changing a solid into a liquid.

Magma: Molten rock containing liquids, crystals, and dissolved gases that forms within the upper part of the Earth's mantle and crust. When erupted onto the Earth's surface, it is called lava.

Mediterranean Climate: Climate Characterized mild wet winters and dry hot summers.

Metabasic Rock: The term metabasic rock refers to metamorphosed basic igneous rock.

Metasedimentary Rock: Sediment or sedimentary rocks that show evidence of having been subjected to metamorphism.

Metavolcanic Rock: A type of metamorphic rock. Such a rock was first produced by a volcano, either as lava or tephra. Then, the rock was buried underneath subsequent rock and was subjected to high pressures and temperatures, causing the rock to re-crystallize. Metavolcanic rock is commonly found in greenstone belts

Mineral Resource Zones: Are categories set forth in the guidelines established by the State Mining and Geology Board that have been adapted to the California Mineral Land Classification Diagram. These adaptations are presented below:
MRZ-1: Areas where available geologic information indicates there is little likelihood for the presence of mineral resources.
MRZ-2a: Areas that contain significant measure of indicated reserves.
MRZ-2b: Areas where geologic information indicates that significant inferred resources or demonstrated sub-economic resources are present.
MRZ-3a: Areas likely to contain undiscovered mineral deposits similar to known deposits in the same producing district or region (hypothetical resources).

MRZ-3b: Areas judged to have a favorable geologic environment for mineral resource occurrence, but where mineral discoveries have not been made in the region (speculative resources).
MRZ-4: Areas where geologic information does not rule out either the presence or absence of mineral resources.

Non-attainment: A term that describes an area that does not meet one or more of the national ambient air quality standards for the criteria pollutants designated in the Clean Air Act.

Sedimentation: Letting solids settle out of wastewater by gravity during treatment.

Seiche: A standing wave oscillating in a partially or fully enclosed body of water. May be initiated by long period seismic waves, wind and water waves, or a tsunami.

Sensitive Receptors: People or other organisms that may have a significantly increased sensitivity or exposure to contaminants by virtue of their age and health (e.g. schools, day care centers, hospitals, nursing homes), status (e.g. sensitive or endangered species), proximity to the contamination, dwelling construction (e.g. basement), or the facilities they use (e.g. water supply well).

Serpentine: Serpentine is a green stone; there are two types of serpentine, bowenite and hydrated magnesium silicate. Bowenite is a jade-like stone (green to black) that is sometimes used in jewelry. The softer variety, hydrated magnesium silicate, is translucent serpentine has a hardness of 4 () - 5.5 (bowenite) and a specific gravity of 2.5 to 2.6. Serpentine is found in the British Isles and some other locations. Connemara marble (from Ireland) is a type of cloudy green serpentine.

Sierra Nevada Geomorphic Province: A 400-mile long northwest southeast trending fault block mountain range with high, very steep eastern escarpment and a gentle western slope that disappears under sediments of the Great Valley (California Geological Survey 2002, Hill 1975).

Sink: Place in the environment where a compound or material collects. The State Mining and Geology Board that have been adapted to the California Mineral

Tsunami: One or a series of huge sea waves caused by earthquakes or other large-scale disturbance of the ocean floor. (Referred to incorrectly by many as a tidal wave, but these waves have nothing to do with tides.) The word tsunami is Japanese, meaning "harbor wave."

Volcanic Rock: Igneous rock generated as a result of volcanic eruptions. Lava flows represent magma that has reached the earth’s surface