I. GLOSSARY OF TERMS AND ACRONYMS

100-Year Flood

A stream flow caused by a discharge that is exceeded, on the average, only once in 100 years. A 100-year flood has a 1% chance of occurrence in any given year.

500-Year Flood

A flood that has a 0.2% change of occurring in a given year.

AAQS

Ambient Air Quality Standard; a federal and state measure of the level of air contamination that is not to be exceeded in order to protect human health.

ac-ft

Acre foot; a unit of measure for water demand and supply. The volume of 1 acre foot would cover 1 acre to a depth of 1 foot and is equal to 325,851 gallons.

ADT

Average Daily Traffic; number of vehicles traveling per normal day on a roadway.

Aerosol

Wet or dry small particles in the atmosphere. Also called "particulate matter."

Aggradation (of a Stream Channel Bed)

Raising of stream bed elevation, caused by sediment supply in excess of sediment-transport capacity.

Air Quality Standard

The specified average concentration of an air pollutant in ambient air during a specified time period, at or above which level the public health may be at risk; equivalent to AAQS.

Algae

A collective term for several taxonomic groups of primitive chlorophyll-bearing plants which are widely distributed in fresh and salt water and moist lands. This term includes the seaweeds, kelps, diatoms, pond scums, and stoneworts.

Alluvium

Soil, sand, gravel, and other material which has been transported and deposited by flowing water. An *alluvial* feature is formed by material which has been deposited by water.

Ambient Air

Any unconfined portion of the atmosphere; the outside air.

Ambient Noise Level

Noise from all sources, near and far. ANL constitutes the normal or existing level of environmental noise at a given location.

Anti-cyclone

Clockwise circulation of air about a high-pressure center.

APCD

Air Pollution Control District; a regional government bureau responsible for attainment and management of air quality standards through permitting and regulating of the emission sources.

APN

Assessor Parcel Number, given to a parcel, or a specified area, of land by County tax assessors.

AOAP

Air Quality Attainment Plan; equivalent to Air Quality Management Plan (AQMP), which outlines rules and regulations for improving and maintaining the quality of air in the region.

AOMD

Air Quality Management District.

AQMP

Air Quality Management Plan.

Arrovo

A stream channel or gully in arid country, usually with steep banks, dry much of the time.

Atmospheric Stability

The resistance to or enhancement of vertical and horizontal air movement, which regulates the amount of air exchange and affects pollution concentration or dispersion.

Average

As a measure, the sum of the measurements (over a specified period) divided by the number of measurements.

Avifauna

Birds.

Backfill

Earth that is replaced after a construction excavation.

BACT

Best Available Control Technology; the most improved devices or air emission reduction technology currently available for controlling pollutant emissions.

BARCT

Best Available Retrofit Control Technology.

Baseline

A set of existing conditions against which change is to be described and measured.

Bed Forms

Local topographical interruptions to the uniformity of a channel bed occurring during the passage of a stream flow.

Berm

A narrow shelf, path, or ledge typically at the top or bottom of a slope; also, an earthen, mounded wall.

Biota

Living organisms.

BLM

Bureau of Land Management

BOD

Biological Oxygen Demand; the free oxygen-removing capability of biologically derived materials in the environment.

Brackish

Pertaining to water, generally estuarine, in which the salinity ranges from 0.5 to 17 parts per thousand by weight.

CAAOS

California Ambient Air Quality Standard; see AAQS.

Calcified

Changed into a hard, stony condition by the deposit of calcium carbonate.

CAL EPA

The state equivalent of the federal EPA (see EPA).

CAL OSHA

The State equivalent of the federal OSHA (see OSHA).

Cal Sites

A list of potentially hazardous sites generated through the DTSC's Control Board.

Caltrans

California Department of Transportation.

CARB

California Air Resources Board, sometimes abbreviated as ARB.

CCAA

California Clean Air Act.

CCR

California Code of Regulations

CDFG

California Department of Fish and Game.

CDMG

California Department of Mines and Geology.

CEQA

California Environmental Quality Act.

CERCLA

Federal Comprehensive Environmental Response, Compensation and Liability Act.

CERCLIS

Comprehensive Environmental Response Compensation and Liability Information System.

CFR

Code of Federal Regulations.

Chaparral

Dense thicket of shrubs and small trees, characteristic of southwestern U.S.

Channel Lining

Artificial hardening of the sides and/or bed of a stream channel to prevent erosion. Concrete, soil cement and rock riprap are typical channel linings.

CIWMB

California Integrated Waste Management Board.

CNDDB

California Natural Diversity Data Base

CNEL

Community Noise Equivalent Level; the averaging of noise levels on a measurement scale of decibels that increases the actual noise measurement, to account

for an increased sensitivity to noise during late evening, nighttime, and morning hours (the increments are 5 dB from 7 to 10 pm and 10 dB from 10 pm to 7 am).

CNPS

California Native Plant Society.

CO

Carbon Monoxide; a colorless, odorless, toxic gas produced by incomplete combustion of carbon in fossil fuels.

Coastal Block

Geologic term describing area adjacent to the coast, which may be faulted or fractured.

Colluvium

Rock detritus and soil accumulated at the foot of a slope.

Conglomerate

Consolidated (sedimentary) stone composed primarily of large, gravel-sized particles.

CPUC

California Public Utilities Commission

CSC

California Species of Concern.

Cultural Horizon

A period of prehistoric time marked by an event that begins a new period of development.

Cultural Resource

Places or objects important for scientific, historical, and religious reasons to cultures, communities, and individuals.

CWA

Clean Water Act

Cyclonic

A large air mass circulating counterclockwise, in northern hemisphere.

\mathbf{D}_{50}

The scaling for particle sizes which references when 1/2 the volume of a streambed sample is below and 1/2 is above the stated size

Decibel (dB)

A logarithmic unit which describes the wide range of sound intensities to which the human ear is sensitive.

Decibel-A Weighted (dBA)

Decibel unit scale that is modified to better represent the relative insensitivity of the human ear to lowpitched sounds.

Degradation (of a Stream Channel Bed)

Lowering of streambed elevation, caused by sediment-transport capacity in excess of the sediment supply. Degradation can be long-term (after the passage of many stream flows) or short-term (caused by a single stream flow).

DEIR

Draft Environmental Impact Report (see EIR).

DEIS

Draft Environmental Impact Statement (see EIS).

DSEIR

Draft Supplemental Environmental Impact Report (see EIR).

DHS

Department of Health Services.

Diffusion model

A model, calculated by formula, graphs, or computer that estimates the dilution of an air pollutant as it is carried downwind. The models are based on physical principles with various simplifications to aid solvability.

DOI

U.S. Department of the Interior; a federal agency responsible for administration of public lands not managed by other federal agencies.

DOT

U.S. Department of Transportation

DTSC

Department of Toxic Substance Control.

EA

Environmental Assessment.

Ecotonal

Biological term describing the geographic boundary between two ecological habitats.

EIR

Environmental Impact Report; an environmental impact assessment document prepared in accordance with the California Environmental Quality Act (CEQA).

EIR/S

Environmental Impact Report and Statement, prepared as a single document for submission to both the state and federal governments and for public review. See EIR.

EIS

Environmental Impact Statement; an environmental impact assessment document prepared in accordance with the National Environmental Policy Act (NEPA).

EMFAC7EP

Emission Factor Version 7EP.

Emission

Unwanted substances released by human activity into air or water.

Emission, primary

An emission that is treated as inert (non-reactive).

Emission. secondary

Unwanted substances that are chemical byproducts of reactive primary emissions.

Emission Control Device

Any piece of equipment that reduces the release of any air pollutant into the atmosphere; see BACT.

Emission Limit

A regulatory standard that restricts the discharge of an air pollutant into atmosphere.

Environmentally Superior Alternative

Alternative selected by the CEQA lead agency which provides an overall environmental advantage over the other alternatives.

EPA

U.S. Environmental Protection Agency; a federal agency that works to protect the environment.

Estuary

Widening area at seaward end of river where its current is met and influenced by ocean tides.

Ethnographic

Pertaining to the branch of anthropology that deals descriptively with specific cultures, especially those of primitive peoples or groups.

Ethnohistoric

Ethnological information collected during historic times, for instance, that from the Spanish mission registers.

Fault

A fracture or zone of fractures in rock strata which have undergone movement that displaces the sides relative to each other, usually in a direction parallel to the fracture. Abrupt movement on faults is a cause of most earthquakes.

FEIR

Final Environmental Impact Report. The Final EIR includes all comments made to the Draft EIR as well as the responses of the lead agency to those comments and is submitted to the state government and the public for review of a proposed project.

FEIS/R

Final Environmental Impact Statement/Report; last version of document submitted to both state and federal governments. See FEIR.

FEMA

Federal Emergency Management Agency

FHWA

Federal Highway Administration.

FIRM

Federal Insurance Rate Maps.

Flora

Plants or plant life.

Forebay

The main area of recharge to a ground water basin.

fp:

Feet per second.

Fugitive dust

Airborne pulverized soil particles.

g

(a) gram; (b) gravities, a unit of acceleration equal to that produced on free falling bodies at the earth's equator.

Geomorphology

The geographical study of the form of the earth. *Geomorphic* means of or pertaining to the shape of the earth or its topographic features.

Geophysical Survey

General term for survey of land forms using geologic mapping, trenching, soil testing, percolation testing, echo sounding, or other techniques.

gpd

Gallons per day, a measure of flow rate.

gpm

Gallons per minute; a measure of flow rate.

HC

Hydrocarbons; a mixture of hydrocarbon compounds usually referred to in the vapor state.

HWIS

Hazardous Waste Information System.

HSWA

Hazardous Solid Waste Act.

HWLC

California Hazardous Waste Control Law.

Hydrocarbons

Compounds composed principally of carbon and hydrogen; they occur in petroleum, natural gas, coal, and bitumens.

Hydrocarbons, nonmethane

Mixture or concentration of hydrocarbons with the methane fraction ignored. One of many formulations for reactive hydrocarbons.

Hydrocarbons, reactive

Mixture or concentration of hydrocarbons with fraction assumed to be nonreactive removed from consideration. See VOC.

Igneous

Igneous refers to a type of rock which is formed from the cooling and solidification of molten rock. Molten rock (magma) is produced due to the high internal core temperature of the earth. Upon cooling, magma becomes igneous rock. Granite and basalt are two common forms of igneous rock.

Inselberg

An isolated hill of solid rock.

Inventory, emission

A list of daily or annual emissions, listed by pollution source category (e.g., trains, refineries, agriculture, etc.).

Inversion

A layer of air in the atmosphere in which the temperature increases with altitude at a rate greater than normal (adiabatic). Pollutants tend to be trapped below the inversion.

Invertebrate

Animals that lack a spinal column.

L_{10}

An average of noise levels that are exceeded 10 percent of the time during the measurement period.

Leq

Average level of sound determined over a specific period of time.

$\mathbf{L}_{\mathbf{dn}}$

The average ambient noise level in dBA with levels between 10 p.m. and 7 a.m. increased by 10 dBA.

Liquefaction

The process of making or becoming liquid (soils).

LOS

Level of Service; a measure of roadway congestion, ranging from A (free flowing) to F (highly congested).

Local Scour

Lowering of a channel bed as a result of a local disturbance to flow, such as bridge piers, a sudden drop or a sharp channel bend.

Low flow

Low rate of water flow due to scant rainfall and low runoff.

Low-Flow Incisement

Formation of a local, small channel inside a larger stream channel as a result of low-discharge flows.

LUST

Leaking underground storage tank

m

Meter, length equal to 30.48 inches.

Macroinvertebrate

Pertaining to invertebrates that are visible to the naked eye.

Macroalgae

Pertaining to large algae, such as kelp, as distinguished from microscopic algae.

Median

The mid-value is a series of values, with half having greater value and half lower value. To be distinguished from "average."

Metamorphic

Metamorphic refers to rocks that have been altered from their original form by heat and pressure.

Microclimate

Distinctive climate within a small geographic area.

Micron

One millionth of a meter

Mixing height

The distance from the ground to a daytime (temperature) inversion layer.

$\mathbf{M}_{\mathbf{L}}$

Richter magnitude.

MM

Modified Mercalli.

MND

Mitigation Negative Declaration.

Monitoring station

A mobile or fixed site equipped to measure instantaneous or average ambient air pollutant concentrations.

MSL

Mean sea level.

NAAQS

National Ambient Air Quality Standards; see AAQS.

NEPA

National Environmental Protection Act

NHPA

National Historic Preservation Act.

Nitrogen oxides

A gaseous mixture of nitric oxide (NO) and nitrogen dioxide (NO₂) and symbolically represented as NO₃).

NO

Nitric oxide. A molecule of one nitrogen and one oxygen atom. Results usually from combustion of organic substances containing nitrogen and from recombination of nitrogen decomposed in air during high temperature combustion.

NO₂

Nitrogen Dioxide. A molecule of one nitrogen and two oxygen atoms. Result usually from further oxidation of nitric oxide (NO) in the atmosphere. Ozone accelerates the conversion.

NO_x

Nitrogen Oxides; poisonous and highly reactive gases produced when fuel is burned at high temperatures, causing nitrogen in the air to combine with oxygen.

Noise level, median

The level of noise exceeded 50 percent of the time. Usually specified as either the daytime or the nighttime median noise level. Also given the designation L_{50} .

NPDES

National Pollution Discharge Elimination System.

NPL

National Priorities List.

NPPA

Native Plant Protection Act.

NPPA

Native Plant Protection Act.

NSR

New Source Review; see Air Quality.

0:

Ozone; a colorless gas formed by a complex series of chemical and photochemical reaction of reactive organic gases, principally hydrocarbons, with the oxides of nitrogen, which is harmful to the public health, the biota and some materials.

ORV

Off-Road Vehicles

OSHA

U.S. Occupational Safety and Health Administration, a federal agency regulating the health safety of the work place.

Oxidant

A mixture of chemically oxidizing compounds formed from ultraviolet stimulated reactions in the atmosphere, with ozone a principal fraction.

Ozone

A molecule of three oxygen atoms -- O_3 A principal component of "oxidant" in photochemically polluted atmospheres.

Particulate matter (particulates)

Very fine sized solid matter or droplets, typically averaging one micron or smaller in diameter. Also called "aerosol."

Ph

A measure of acidity or alkalinity.

Photochemical Pollutant

Reactive organic compounds (ROC) and nitrogen oxides (NOx), photochemical pollutants that absorb energy from the sun and react chemically to form ozone (O_3) .

Phytoplankton

Microscopic plants that form the base of the marine/aquatic food chain.

PM10

Particulate matter less than 10 micron in size, which is small enough to be inhaled deeply into the lungs and cause disease.

ppb

Parts per billion, a measure of the amount of one substance in a second, which is the carrier.

ppm

Parts per million, a measure of the amount of one substance found in a carrier.

ppt

Parts per thousand, a measure of the amount of one substance found in a carrier.

psi

Pounds per square inch.

RCRA

Federal Resource Conservation and Recovery Act. **Riparian**

Area along the banks of a river or lake supporting specialized plant and animal species.

Riprap

A foundation constructed of broken stones or boulders loosely placed or thrown together, as in deepwater, on a soft bottom, or as a seawall to protect against erosion.

ROC

Reactive Organic Compounds (see Air Quality) that are chemically sensitive to the ultraviolet light in sunlight.

ROD

Record of Decision.

ROW

Right of way; an area or strip of land to allow access or to allow a utility to pass through public or private lands.

RWQCB

Regional Water Quality Control Board.

SCAB

South Coast Air Basin; see Air Quality...

SCAQMD

South Coast Air Quality Management District

SCS

Soil Conservation Service

SCWC

Southern California Water Company

SEA

Significant Ecological Area; an area containing an ecosystem of value and requiring government protection.

Sedimentary

Sedimentary refers to a type of rock which is formed by the consolidation of rock particles. These particles are usually transported from their source by forces of erosion, such as wind, water, and glaciers. Over time, the particles become cemented or consolidated into rock. Shale and sandstone are two forms of sedimentary rock.

Seedbank

The layer of topsoil containing native plant seed material, which is frequently used as a "seed bank" for revegetation of native plants.

SEIR

Supplemental Environmental Impact Report.

Seismicity

The relative frequency and distribution of earthquakes.

Sensitive Receptor

That segment of the population that because of age or weak health is more susceptible to the effects of air pollution, noise, oil spill. etc., than the population at large.

Shrink-swell potential

Is the expansion or contraction of primarily clay-rich soils during alternating wetting and drying cycles.

SHPO

State Historic Preservation Officer

CID

State Implementation Plan (see Air Quality); a document required periodically from each county by EPA that indicates the progress and the planning of the county for improving the quality of its air.

Slough

A place of deep mud or mire; bog. A stagnant swamp, backwater, bayou inlet, or pond in which water backs up.

SO_x

Sulfur oxides. The group of compounds formed during combustion or thereafter in the atmosphere of sulfur compounds in the fuel, each having various levels of oxidation, ranging from two oxygen atoms for each sulfur atom to four oxygen atoms.

SO₂

Sulfur Dioxide; a corrosive and poisonous gas produced from the complete combustion of sulfur in fuels.

Stream Scour

Lowering of a streambed during the passage of a single stream flow. Stream scour can be local in nature (see Local Scour) or more widespread (see General Scour).

Substrate

Geologic term describing soil or geologic layers underlying a project site or construction area.

Sulfates

Compounds in air or water that contain four oxygen atoms for each sulfur atom. See SO_x.

Sulfur oxides

A gaseous mixture of sulfur dioxide (SO_2) and sulfur trioxide (SO_3) and symbolically represented as SO_x . Can include particulate species such as sulfate compounds ($-SO_4$).

SWRCB

State Water Resources Control Board.

SWPPP

Storm Water Pollution Prevention Plan.

TAC

Toxic Air Contaminants.

TCM

Transportation Control Measures.

TDM

Transportation Demand Management; a system of analysis designed to reduce traffic levels and thereby reduce air pollution.

TDS

Total Dissolved Solids

Terrestrial

Related to or living on land. Terrestrial biology deals with upland areas as opposed to shorelines or coastal habitats.

THC

Total Hydrocarbon.

tpd

Tons per day.

TSCP

Toxic Substance Control Program.

TSP

Total Suspended Particulates; solid or liquid particles small enough to remain suspended in air. PM_{10} is the portion of TSP that can be inhaled.

Tsunami

A long gravity oceanic wave generated by sudden movements of the ocean bottom during submarine earthquakes, landslides, or volcanic activity.

Turbidity

Cloudiness or muddiness of water or ocean, resulting from suspended or stirred up particles.

UCB

Uniform Building Code.

ug/m³

Millionths of a gram per cubic meter, a unit of concentration in liquids or gases.

USACE

U.S. Army Corps of Engineers

USFS

U.S. Department of Agriculture, Forest Service.

USFWS

U.S. Fish and Wildlife Service.

USGS

U.S. Geological Survey (an agency of the U.S. Department of the Interior).

Utility Corridor

A strip of land, or an easement, on which utility or pipelines are constructed.

Vapor Recovery

Air pollution control methods, which reduce emissions by capturing vapors to avoid their release into the atmosphere.

Vapor Transfer

An emission control device, which recovers volatile pollutants, such as hydrocarbons, and relocates them to a location for recovery or destruction.

V/C

Volume to Capacity ratio; a measure of the capacity of a roadway. When V/C is 100 percent, no more traffic can be accommodated.

Visual sensitivity

Consideration of people's uses of various environments and their concerns for maintenance of scenic quality and open-space values; examples of areas of high visual sensitivity would be areas visible from scenic highways, wilderness areas, parks, recreational water bodies, etc.

VMT

Vehicle miles traveled, usually per day.

VOC

Volatile organic compounds.

vpd

Vehicles per day; see Transportation.

Wetland

Lands transitional between obviously upland and aquatic environments. Wetlands are generally highly productive environments with abundant fish, wildlife, aesthetic, and natural resource values. For this reason, coupled with the alarming rate of their destruction, they are considered valuable resources, and several regulations and laws have been implemented to protect them.

Zooplankton

Microscopic marine/aquatic animals generally carried within a water mass