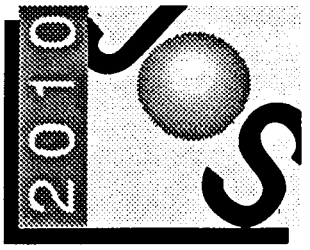
Appendix F

Glossary and Acronym List



GLOSSARY AND ACRONYM LIST

This glossary was developed to assist reviewers of the EIR in understanding common terms used throughout the document. Most terms were defined using the California Association of Sanitation Agencies' Glossary prepared for the wastewater industry in 1989. Other terms were defined using industry standards. All definitions are intended to provide a general knowledge of the material and methodologies in the EIR and are not necessarily the only definitions associated with the terms.

Glossary

abatement - The act of diminishing. In wastewater technology, reducing water pollution either by controls on sources of pollution or by treatment of polluted waters. An enforcement action stopping a polluting discharge.

acre-foot - A volume of water (conceptually, 1 foot of water covering an acre, or 43,560 cubic feet).

activated carbon - Adsorptive particles or granules usually obtained by heating carbonaceous material in the absence of air or in steam and possessing a high capacity to selectively remove trace and soluble components from solution.

activated carbon adsorption - Removal of soluble components from aqueous solution by contact with highly adsorptive granular or powdered carbon.

activated carbon treatment - Treatment process in which water is brought into contact with highly adsorptive granular or powdered carbon to remove soluble components. Process may be applied to raw water, primary effluent, or chemically clarified wastewater for nonspecific removal of organics or to secondary effluent as a polishing process to remove specific organics.

activated sludge - Sludge withdrawn from a secondary clarifier following the activated sludge process; it consists mostly of biomass, with some inorganic settleable solids. Return sludge is recycled to the head of the aeration tank (process); waste (excess) sludge is removed for processing.

activation - (1) The generation, under aerobic conditions, of organisms capable of absorbing organic material from the water in the activated sludge process. (2) The process of making a material radioactive by bombardment with neutrons, protons, or other nuclear particles. (3) The process of making a solid material capable of selective action.

aerated contact bed - A biological treatment unit consisting of stone, cement-asbestos, or other surfaces supported in an aeration tank in which air is diffused up and around the surfaces and settled wastewater flows through the tank. Also called contact aerator.

aerated pond - A natural or artificial wastewater treatment pond in which mechanical or diffused-air aeration is used to supplement the oxygen supply.

aeration - (1) The bringing about of intimate contact between air and a liquid by one or more of the following methods: (a) spraying the liquid into the air, (b) bubbling air through the liquid, or (c) agitating the liquid to promote surface absorption of air. (2) The supplying of air to confined spaces, downstream from gates in conduits, and so on to relieve low pressures and to replenish air entrained and removed from such confined spaces by flowing water.

aeration period - (1) The theoretical time, usually expressed in hours, during which mixed liquor is subjected to aeration in an aeration tank while undergoing activated sludge treatment. It is equal to the volume of the tank divided by the volumetric rate of flow of the wastewater and return sludge. (2) The theoretical time during which water is subjected to aeration.

aeration tank - A tank in which wastewater or another liquid is aerated.

aerobic bacteria - Bacteria that require free elemental oxygen to sustain life.

aerobic digestion - The breakdown of suspended and dissolved organic matter in the presence of oxygen. Usually associated with digestion of wastewater sludge.

agitator - Mechanical apparatus for mixing, aerating, or both; a device for creating turbulence.

alluvial - Relating to material deposited by flowing water.

Alquist Priolo Special Study Zone - A study area of recent geologic activity generally studied by the U.S. Geologic Survey or the California Division of Mines and Geology; currently known as earthquake fault zones.

anaerobic - (1) A condition in which no free oxygen is available. (2) Requiring, or not destroyed by, the absence of air or free oxygen.

anaerobic digestion - The degradation of organic matter, typically the biological reduction of sludges to methane, brought about through the action of microorganisms in the absence of elemental oxygen.

annual average daily traffic (AADT) - The average number of vehicles passing a specified point during a 24-hour period in a given year.

AQMP (air quality management plan) - A plan designed to attain the state ambient air quality standards.

aquifer - An underground geologic formation bearing groundwater in usable quantities.

autoclaving - The process of sterilizing materials by exposure to steam under pressure.

BACT (best available control technology) - Emission limitation based on the maximum degree of reduction of each pollutant emitted from any major emitting facility, which the permitting authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts, determines is achievable for such facility.

bacteria - A group of universally distributed, rigid, essentially unicellular microscopic organisms lacking chlorophyll. They perform a variety of biological treatment processes, including biological oxidation, sludge digestion, nitrification, and denitrification.

bar screen - A screen composed of parallel bars, either vertical or inclined, placed in a waterway to catch debris. The screenings are raked from it either manually or automatically. Also called bar rack, rack.

bathymetry - The science of measuring the depths of oceans; the topographic maps of the sea floor resulting from such measurements.

benthic - Relating to the bottom or bottom environment (including sediments) of a body of water.

benthos - The plants and animals living on, in, or closely associated with the bottom of the ocean.

bioaccumulation - A general term describing a process by which chemicals are taken up by aquatic organisms from water directly or through consumption of food containing the chemicals.

biomass - The total mass of living organisms in a particular area or volume.

BOD (biochemical oxygen demand) - The quantity of oxygen used in the biochemical oxidation of organic matter in a specified time, at a specified temperature, and under specified conditions. (2) A standard test used in assessing wastewater strength.

borings - (1) Subsurface investigations performed by drilling down to the desired depth, removing samples of the material penetrated so that it can be examined at the surface, recording the elevation at which changes in material are found, obtaining samples in a disturbed or undisturbed condition from the various strata, and preparing a log or chart of the boring data. Borings may be classified as follows: (a) soil auger boring, (b) churn drilling, (c) rotary drilling, or (d) core boring. (2) Holes made by boring. (3) Material removed by boring.

BTU (British thermal unit) - A unit of energy; there are approximately 1,000 BTUs in a cubic foot of natural gas.

Business Plan Act - A state statute that requires businesses using hazardous materials to prepare a plan describing the facility, inventory, emergency response plans, and training programs; also known as the Hazardous Materials Release Response Plans and Inventory Act.

cake - Separated solids remaining after centrifugation.

Cal-OSHA (California Occupational Safety and Health Administration) - The state agency responsible for worker safety and health.

California Ocean Plan - The water quality control plan developed by the SWRCB that is applicable to point-source discharges to the ocean.

CERCLA (Comprehensive Environmental Response Compensation and Liability Act) - A federal statute that establishes a comprehensive national program to identify active and abandoned waste disposal sites that pose a threat to human health or the environment, identify responsible parties to pay cleanup costs, and create a fund to pay for the cleanup of abandoned sites where no responsible parties can be found.

cogeneration - The production of energy as a byproduct of another process.

conformity - The condition or act of being in agreement.

centrifugation - Imposition of a centrifugal force to separate solids from liquids based on density differences. In sludge dewatering, the separated solids commonly are called cake, and the liquid is called centrate.

centrifuge - A mechanical device in which centrifugal force is used to separate solids from liquids, separate liquids of different densities, or both.

chlorination - The application of chlorine or chlorine compounds to water or wastewater, generally for the purpose of disinfection, but frequently for chemical oxidation and odor control.

chlorine contact chamber - A detention basin provided to diffuse chlorine through water or wastewater and to provide adequate contact time for disinfection.

clarification - Any process or combination of processes the primary purpose of which is to reduce the concentration of suspended matter in a liquid. Term formerly used as synonym of settling and sedimentation. In recent years, latter terms preferable when describing settling process.

clarifier - Any large circular or rectangular sedimentation tank used to remove settleable solids in water or wastewater. A special type of clarifiers, called upflow clarifiers, use flotation rather than sedimentation to remove solids.

Clean Air Act - Federal law that established national air pollution authority and mandated that national ambient air quality standards be promulgated and enforced.

CO (carbon monoxide) - An air pollutant emitted from automobile exhaust and regulated by the Clean Air Act.

COD (chemical oxygen demand) - An index of the total organic content of a water sample.

coliform - One group of bacteria. The presence of coliform-group bacteria is an indication of possible pathogenic bacterial contamination. Fecal coliforms are those coliforms found in the feces of various warm-blooded animals, whereas the term "coliform" also includes other environmental sources.

contact bed - (1) An artificial bed of coarse material providing extensive surface area for biological growth in watertight basin. Wastewater exposure to the surface may be accomplished by cycling or by continuous flow through controlled inlet and outlet. (2) An early type of wastewater filter consisting of a bed of coarse, broken stone or similar inert material placed in a watertight tank or basin that can be completely filled with wastewater and then emptied. Operation consists of filling, allowing the contents to remain for a short time, draining, and then allowing the bed to rest. The cycle is then repeated. A precursor to the trickling filter.

contact tank - A tank used in water or wastewater treatment to promote contact between treatment chemicals or other materials and the body of liquid treated.

critical reach - A 1.5-mile stretch of the San Gabriel Tidal Prism, critical in examining the effects of WRP discharges to the San Gabriel River.

dechlorination - The partial or complete reduction of residual chlorine by any chemical or physical process.

DDD (dichloro diphenyl dichloroethane) - A colorless, crystalline insecticide closely related to DDT but considered less toxic to animals.

DDE (dichloro diphenyldichloro ethylene) - A toxic residue of DDT often found in animal tissue or the environment.

DDT (dichloro diphenyl trichloroethane) - A powerful insecticide that is restricted by law.

demersal - Found on or near the bottom of the ocean.

designated mixing zone - A predetermined area where mixing occurs.

dewatered sludge - The solid residue remaining after removal of water from a wet sludge by draining or filtering. Dewatering is distinguished from thickening in that dewatered sludge may be transported by solids handling procedures.

dewatering - The process of partially removing water; may refer to removal of water from a basin, tank, reservoir, or other storage unit or to separation of water from solid material.

digester - A tank or other vessel for the storage and anaerobic or aerobic decomposition of organic matter present in sludge.

digested sludge - Sludge digested under either aerobic or anaerobic conditions until the volatile content has been reduced to the point at which the solids are relatively nonputrescible and inoffensive.

digestion - (1) The biological decomposition of organic matter in sludge that results in partial liquefaction, mineralization, and volume reduction. (2) The process carried out in a digester.

disinfection - The killing of waterborne fecal and pathogenic bacteria and viruses in potable water supplies or wastewater effluents with a disinfectant; an operational term that must be defined within limits, such as achieving an effluent with no more than 200 colonies of fecal coliform per 100 ml.

DO (dissolved oxygen) - (1) The oxygen dissolved in water, wastewater, or other liquid, usually expressed in milligrams per liter or percent of saturation. (2) A measure of pollution in oceans and rivers receiving wastewaters or agricultural drainage; in general, higher DO indicates higher purity.

drinking water standards - Standards that define allowable concentrations of coliforms and certain chemicals, physical characteristics, and radioactivity in drinking water. They are prescribed by federal, state, and local authorities and also contain sampling monitoring and reporting requirements.

easement - An acquired legal right to the use of land owned by others, either temporarily or permanently. Ordinarily more restricted in scope than a leasehold, such as the right to install and maintain utility lines.

effluent - (1) A liquid that flows out of a process or confined space. (2) Wastewater or other liquid, partially or completely treated or in its natural state, flowing out of a reservoir, basin, treatment plant, or industrial treatment plant or part thereof. (3) An outflowing branch of a main stream or lake. (4) An emission of gas.

final sedimentation tank - A tank through which the effluent from a trickling filter, an aeration or contact-aeration tank, or physical-chemical treatment process is passed to remove settleable solids. Usually refers to the last step of settling in a secondary treatment process. The term "secondary settling" is used when secondary treatment is followed by further treatment. Also called final settling basin.

FIP (Federal Implementation Plan) - A requirement of the federal Clean Air Act Amendments of 1977 and 1990 that requires the U.S. Environmental Protection Agency to prepare a plan to achieve improved air quality standards.

first responder awareness level - An individual who is likely to witness or discover a hazardous substance release and who has been trained to initiate an emergency response sequence. The level of hazardous materials response training is defined by 29 CFR 1910.120 and includes an understanding of what hazardous substances are and the risks associated with them in an incident; an understanding of the potential outcomes associated with an emergency created when hazardous substances are present; the ability to identify the hazardous substances, if possible; an understanding of the role for the first responder awareness individual; and the ability to realize the need for additional resources.

general plan - A planning document that cities and counties are required by state law to have. The general plan contains a framework of policies that guide development. The document also contains, at a minimum, a land use map showing the pattern of types of development, but may contain several additional planning maps.

gpd - The flow rate of water, wastewater, or other liquid flow measured in U.S. gallons per day.

gravity system - (1) A system of conduits (open or closed) in which the liquid runs on descending gradients from source to outlet and where no pumping is required. (2) A water distribution system in which no pumping is required.

grit - The heavy suspended mineral matter present in water or wastewater, such as sand, gravel, or cinders. It is removed in a pretreatment unit called a grit chamber to avoid abrasion and wearing of subsequent treatment devices.

grit chamber - A detention chamber or an enlargement of a sewer designed to reduce the velocity of flow of the liquid to permit the separation of mineral from organic solids by differential sedimentation.

GWh (gigawatt-hour) - A unit of energy. One GWh is equivalent to 1 million kWh.

hazardous materials - Raw materials and products that, because of their quantity, concentration, or physical or chemical characteristics, pose a significant present or potential hazard to human health and safety or to the environment if released.

hazardous materials technician - An individual who responds to releases or potential releases in order to stop the release. The hazardous materials technician has a training level equal to or exceeding first responder awareness level; additional competency requirements are defined in 29 CFR 1910.120.

hazardous waste - Any waste that is potentially damaging to environmental health because of toxicity, ignitability, corrosivity, chemical reactivity, or other action.

health risk assessment (HRA) - An estimate of the potential cancer and noncancer health risks to the surrounding population resulting from emissions produced by an existing or proposed stationary source.

high-occupancy vehicle lane (HOV) - A lane reserved for the use of vehicles with more than a preset number of occupants. These vehicles include buses, taxis, and carpool vehicles.

HMTA (Hazardous Materials Transportation Act) - A federal statute that governs the transportation of hazardous materials.

HWCA (Hazardous Waste Control Act) - A state statute that establishes requirements for the proper management of hazardous substances and wastes regarding identifying, classifying, generating, transporting, permitting, treating, and handling hazardous waste.

inert media - Filtering media, often sand, coal, or other material, which is not chemically active and acts as a physical sieve to remove particles from water; dual-media filters generally employ coal and sand.

infiltration - (1) The flow or movement of water through the interstices of pores of a soil or other porous medium. (2) The quantity of groundwater that leaks into pipe through joints, porous walls, or breaks. (3) The entrance of water from the ground into a gallery. (4) The absorption of liquid by the soil either as it falls either from precipitation or from a stream flowing over the surface.

influent - Water, wastewater, or other liquid flowing into a reservoir, basin, or treatment plant or treatment process.

interceptor - A sewer that conducts dry-weather and storm water to a point for treatment or disposal; usually an interceptor receives flows from transverse sewers or outlets.

intersection capacity utilization - A method for calculating the level of service at an intersection.

JOD (Joint Outfall Districts) - The organization of 15 districts that are located in metropolitan Los Angeles County that participate in an agreement to combine investment in wastewater conveyance and treatment facilities; the JOD includes Districts 1, 2, 3, 5, 8, 15, 16, 17, 18, 19, 21, 22, 23, 29, and South Bay Cities.

JOS (Joint Outfall System) - A network of trunk sewers, pumping plants, treatment plants, and ocean outfalls owned in common by JODs.

kelp beds - Groupings of any order of large, coarse, brown algae.

kWh (kilowatt-hour) - A unit of energy. One kWh is generated when a 1,000-watt power source is operated for 1 hour. There is approximately 1/3 kWh in a cubic foot of natural gas.

lateral sewer - A sewer that discharges into a branch or other sewer and has no other sewer and no common sewer tributary to it.

lift station - A structure that contains pumps and appurtenant piping, valves, and other mechanical and electrical equipment for pumping water, wastewater, or other liquid. Also called pump station.

liquefaction - The process of changing into a liquid.

level of service (LOS) - A qualitative measure describing the quality of traffic service provided by a facility. This method uses letters A through F to describe the best to worst driving conditions, respectively.

MACT (maximum achievable control technology) - emission limitations that apply to construction, reconstruction, or modifications to major sources of hazardous air pollutants. The primary consideration in establishing MACT standards is technology, with costs and environmental and energy impacts playing a role.

mgd - Million gallons per day, a measure of flow equivalent to 1.547 cfs or 681 gpm.

mg/l - Milligrams per liter, a measure of concentration equivalent to and replacing ppm in the case of dilute solutions.

mixed liquor - A mixture of raw or settled wastewater and activated sludge contained in an aeration tank in the activated sludge process.

Modified Mercalli Intensity Scale - A measure of earthquake intensity on a scale of 1 (not felt) to 12 (total destruction).

Montebello Forebay - Refers to the principal groundwater recharge area for the Coastal Plain aquifers, located just south of the Whittier Narrows; principal sites for recharge are Rio Hondo and San Gabriel River percolation basins.

NH_3 (molecular ammonia) - a compound consisting of nitrogen and hydrogen; when in solution, this compound can be toxic to fish under certain levels of concentration, pH, temperature, and salinity.

nitrification - Biological conversion of ammonia (NH_3) to nitrate (NO_3).

NO (nitric oxide) - An air pollutant regulated by the Clean Air Act.

NO_2 (nitrogen dioxide) - An air pollutant regulated by the Clean Air Act.

nonpoint pollution - Human-made or human-induced alteration of the chemical, physical, biological, or radiological integrity of water, originating from any source other than a point source.

nonpoint source - Any source, other than a point source, that discharges pollutants into air or water.

NO_x (oxides of nitrogen) - An air pollutant regulated by the Clean Air Act.

NPDES (National Pollutant Discharge Elimination System) permit - The regulatory agency document designed to control all discharges of pollutants from point sources into U.S. waterways. NPDES permits regulate discharges into navigable waters from all point sources of pollution, including industries, municipal treatment plants, large agricultural feed lots, and return irrigation flows.

ocean outfall - Facilities for the discharge of wastewater and/or storm drainage into the ocean.

on-scene incident commander - An individual who assumes control of an incident scene. The on-scene incident commander has a level of training equal to or exceeding first responder awareness level; additional competency requirements are defined by 29 CFR 1910.120.

oxidant - A measure of photochemical air pollution; oxidant is produced in the atmosphere by reactions involving sunlight and reactive hydrocarbons.

oxidation - (1) A chemical reaction in which the oxidation number (valence) of an element increases because of the loss of one or more electrons by that element. Oxidation of one element is accompanied by simultaneous reduction of the other reactant. (2) The conversion of organic materials to simpler, more stable forms with the release of energy, accomplished by chemical or biological means. (3) The addition of oxygen to a compound.

oxidation ditch - A secondary wastewater treatment facility that uses an oval channel with a rotor placed across it to provide aeration and circulation. The screened wastewater in the ditch is aerated by the rotor and circulated at about 1 to 2 feet per second.

pathogen - Any agent, especially a microorganism, able to cause disease.

pathogenic bacteria - Bacteria that cause disease in the host organism by their parasitic growth.

PCBs (polychlorinated biphenyls) - A class of aromatic organic compounds with two six-carbon unsaturated rings, with chlorine atoms substituted on each ring and more than two such chlorine atoms per molecule of PCB. They are typically very stable, resist both chemical and biological degradation, and are toxic to many organisms.

peak period - The period during which the maximum amount of travel occurs. It may be specified as the morning (a.m.) or afternoon (p.m.) peak.

pelagic - The ocean waters above the bottom, including near-surface, typically associated with ocean currents and tides.

pH - A measure of the hydrogen-ion concentration in a solution, expressed as the logarithm (base ten) of the reciprocal of the hydrogen-ion concentration in gram moles per liter. On the pH scale (0-14), a value of 7 at 25°C represents a neutral condition. Decreasing values below 7 indicate increasing hydrogen-ion concentration (acidity); increasing values above 7 indicate decreasing hydrogen-ion concentration (alkalinity).

phenols - A class of organics, toxic to aquatic life in sufficiently high concentrations, removed by secondary treatment.

photic zone - The uppermost layer in a body of water into which daylight penetrates in sufficient amounts to influence living organisms, especially by photosynthesis.

PM10 (particulate matter 10 microns or less in diameter) - An air pollutant regulated by the Clean Air Act.

polymers - Synthetic organic compound with high molecular weight and composed of repeating chemical units (monomers); they may be polyelectrolytes, such as water-soluble flocculants or water-insoluble ion exchange resins, or insoluble uncharged materials, such as those used for plastic or plastic-lined pipe and plastic trickling filter media.

ppm (parts per million) - The number of weight or volume units of a minor constituent present with each one million units of a solution or mixture.

practical quantification limit (PQL) - A practical and routinely achievable detection limit with relative certainty that the reported concentration value is reliable; PQL is typically five times the method detection level and is the lowest achievable level in laboratories with specified limits during routine laboratory operations.

primary effluent - The liquid portion of wastewater leaving primary treatment.

primary settling tank - The first settling tank for the removal of settleable solids through which wastewater is passed in a treatment works.

primary treatment - (1) The first major treatment in a wastewater treatment facility, usually sedimentation but not biological oxidation. (2) The removal of a substantial amount of suspended matter but little or no colloidal and dissolved matter. (3) Wastewater treatment processes usually consisting of clarification with or without chemical treatment to accomplish solid-liquid separation.

pycnocline - A layer, zone, or gradient of changing density, especially a thin layer of ocean water with a density that increases with depth.

relief sewer - (1) A sewer built to carry the flows in excess of the capacity of an existing sewer. (2) A sewer intended to carry a portion of the flow from a district in which the existing sewers are of insufficient capacity, thus preventing the existing sewers from being overtaxed.

reuse - Application of appropriately treated wastewater to a constructive purpose.

right-of-way - A right of passage over another person's land.

ROG (reactive organic gases) - Air pollutants regulated by the Clean Air Act.

RWQCB (Regional Water Quality Control Board) - The state agency generally responsible for regulating both the discharge from municipal and industrial wastewater treatment plants and the water quality impacts related to sanitary landfills.

safety valve - A valve that automatically opens when prescribed conditions, usually of pressure, are exceeded in a pipeline or other closed receptacle containing liquids or gases and prevents such conditions from being exceeded and causing damage.

sanitation district - A public agency formed under the County Sanitation District Act (California Health and Safety Code 4700 and following).

SARA (Superfund Amendment Reauthorization Act) Title III - A federal statute that grants individuals information concerning chemicals located in their communities or workplace and that provides for emergency preparedness to react to environmental accidents.

SCAB (South Coast Air Basin) - The region consisting of all of Orange County and the nondesert portions of Los Angeles, San Bernardino, and Riverside Counties.

SCAG (Southern California Association of Governments) - A voluntary organization of municipal governments in the six-county area in southern California.

SCAQMD (South Coast Air Quality Management District) - A special district created by the California legislature to manage the air quality in the South Coast Air Basin and the Southeast Desert Air Basin. The SCAQMD is responsible for stationary and indirect source control, air monitoring, and preparation of air quality attainment plans.

SCBA (self contained breathing apparatus) - A breathing device, similar to scuba gear, used by firemen and others when working in an unhealthy atmosphere.

screen - (1) A device with openings, generally of uniform size, used to retain or remove suspended or floating solids in flowing water or wastewater and to prevent them from entering an intake or passing a given point in a conduit. The screening element may consist of parallel bars, rods, wires, grating, wire mesh, or perforated plate, and the openings may be of any shape, although they are usually circular or rectangular. (2) A device used to segregate granular material, such as sand, crushed rock, and soil, into various sizes.

screening - A pretreatment process to remove large suspended or floating solids from raw sewage or water to prevent subsequent plugging of pipes or damage to pumps.

screenings - (1) Material removed from liquids by screens. (2) Broken rock, including the dust, of a size that will pass through a given screen, depending on the character of the stone.

secondary treatment - (1) Generally, a level of treatment that produces removal efficiencies for biological oxygen demand and suspended solids of 85%. (2) Sometimes used interchangeably with concept of biological wastewater treatment, particularly the activated sludge process. Commonly applied to treatment that consists chiefly of clarification followed by a biological process, with separate sludge collection and handling.

sedimentation - (1) The process of subsidence and decomposition of suspended matter carried by water, wastewater, or other liquids, by gravity. It is usually accomplished by reducing the velocity of the liquid below the point at which it can transport the suspended material. Also called settling. May be enhanced by coagulation and flocculation. (2) In geology, sedimentation consists of five fundamental processes: weathering, erosion, transportation, deposition, and consolidation into rock. (3) Solid-liquid separation resulting from the application of an external force, usually settling in a clarifier under the force of gravity. It can be variously classed as discrete, flocculent, hindered, or zone sedimentation.

sedimentation basin - A basin or tank in which water or wastewater containing settleable solids is retained to remove by gravity a part of the suspended matter. Also called sedimentation tank, settling basin, and settling tank.

seismicity - The degree to which a region of the earth is subject to earthquakes.

SIP (State Implementation Plan) - A requirement of the federal Clean Air Act Amendments of 1990 that requires air districts to prepare plans designed to achieve air quality standards; a SIP is required for each nonattainment area pollutant.

skimmings - Grease, solids, liquids, and scum skimmed from wastewater settling tanks.

sludge - (1) The accumulated solids separated from liquids, such as water or wastewater, during processing. (2) Organic deposits on bottom of streams or other bodies of water. (3) The removed material resulting from chemical treatment, coagulation, flocculation, sedimentation, flotation, or biological oxidation of water or wastewater. (4) Any solid material containing large amounts of entrained water collected during water or wastewater treatment.

sludge cake - Wastewater solids that have been sufficiently dewatered to form a semisolid mass.

sludge digestion - The process by which organic or volatile matter in sludge is gasified, liquified, mineralized, or converted into more stable organic matter through the activities of either anaerobic or aerobic organisms.

sludge digestion tank - A tank in which sludge is placed for the purpose of permitting digestion to occur.

sludge lagoon - A basin used for the storage, digestion, or dewatering of sludge.

sludge thickening - The increase in solids concentration of sludge in a sedimentation or digestion tank.

SO_x (sulfur dioxide) - An air pollutant regulated by the Clean Air Act.

soil amendment - A product produced from sewage sludge in combination with other materials that, when applied and mixed into soils, provide agronomic benefits.

solid waste - Discarded material, such as garbage, refuse, sludge, and scrap, that is most commonly landfilled but may be incinerated or recycled.

Southern California Bight - The open embayment of the Pacific Ocean extending from Point Conception in the north to Cabo Colnett, Baja California, in the south. The California Current roughly defines the Bight in the west.

Southern California Coastal Water Research Project (SCCWRP) - A private research organization actively pursuing oceanic research off southern California.

spoils - Extra earth left over after excavation.

SWRCB (State Water Resources Control Board) - The agency with overall responsibility for protecting water quality and administering the Clean Water Grant Program in California through delegation agreements with the Environmental Protection Agency.

TDM (transportation demand management) - Techniques for reducing traffic congestion, such as ridesharing programs and flexible work schedules, that are based on reducing the demand on the roadway facilities.

tertiary effluent - The liquid portion of wastewater leaving tertiary treatment.

tertiary treatment - The treatment of wastewater beyond the secondary or biological stage. This term normally implies the removal of nutrients, such as phosphorus and nitrogen and of a high percentage of suspended solids.

tidal prism - The tidal zone extending 4-5 miles inland from mouth of the San Gabriel River.

TOC (total organic carbon) - The total amount of organic carbon.

trip - A one-way movement of a vehicle between two points.

trickling filter media - Rocks or other durable materials that make up the body of a filter.

turbidity - (1) A condition in water or wastewater caused by the presence of suspended matter, resulting in the scattering and absorption of light. (2) Any suspended solids imparting a visible haze or cloudiness to water that can be removed by filtration. (3) An analytical quantity usually reported in turbidity units determined by measurements of light scattering.

unincorporated area - Public or privately owned land that is outside of the city limits.

vacuum filtration - A usually continuous filtration operation that is generally accomplished on a rotating cylindrical drum. As the drum rotates, part of its circumference is subject to an internal vacuum that draws sludge to the filter medium and removes water for subsequent treatment. The dewatered sludge cake is released by a scraper.

VMT (vehicle miles of travel) - A measurement of total miles traveled in all vehicles in the area for a specified period. This measurement is calculated by multiplying the number of vehicles by the miles traveled in a given area or on a given roadway during the time period, and is a principal variable determining motor vehicle air pollutant emissions.

vehicle occupancy - The number of people aboard a vehicle at a given time.

wastewater - The spent or used water of a community or industry that contains dissolved and suspended matter.

zone of initial dilution - The area were dilution first occurs in a mixing zone.

zoning - A specific description of the types of land uses permitted in an area. The zoning map, which must be consistent with the land uses identified on the general plan land use map, shows more specifically the types of allowable land uses.

Acronym List

µg/l	micrograms per liter
µg/m³	micrograms per cubic meter
µmhos	micromhos
1977 Plan	1977 JOS Facilities Plan
2010 Plan	JOS 2010 Master Facilities Plan
AADT	annual average daily traffic
AB	Assembly Bill
af	acre-feet
AQMP	Air Quality Management Plan
ARB	California Air Resources Board
BACT	best available control technology
BMPs	best management practices
BOD	Biochemical oxygen demand
Cal-EPA's	California
Cal-OSHA	California Occupational Safety and Health Administration
Caltrans	California Department of Transportation
CCPP	combined-cycle power plant
CCR	California Code of Regulations
CDMG	California Division of Mines and Geology
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response Compensation and CNEL
CNEL	community noise equivalent level
CNPS's	California Native Plant Society's
CO	Carbon monoxide
COD	chemical oxygen demand
CWA	Clean Water Act
dB	decibels
DFG	California Department of Fish and Game
Districts	County Sanitation Districts of Los Angeles County
DO	dissolved oxygen
DOF	California Department of Finance
DOHS	Department of Health Services
DPW	Los Angeles County Department of Public Works
DTSC	Department of Toxic Substances Control
DWR	California Department of Water Resources
EDD	Economic Development Department
EIR	environmental impact report
FHWA	Federal Highway Administration
FIP	federal implementation plan
GIS	geographic information system
GWh	gigawatt-hours
HCH	hexachlorocyclohexane
HOV	High-occupancy vehicle
hp	horsepower
HRA	health risk assessment
HWCA	Hazardous Waste Control Act

Hz	hertz
I-5	Santa Ana Freeway
I-10	Santa Monica Freeway
I-105	Glenn Anderson Freeway
I-110	Harbor Freeway
I-210	Foothill Freeway
I-405	San Diego Freeway
I-605	San Gabriel River Freeway
I-710	Long Beach Freeway
JAA	a Joint Administration Agreement
JEIP	Joint Emissions Inventory Program
JOA	Joint Outfall Agreement
JOD	Joint Outfall Districts
JOS	Joint Outfall System
km	kilometers
kWh	kilowatt-hours
LACFD	Los Angeles County Fire Department
LADPR	Los Angeles County Department of Parks and Recreation
L_{dn}	day-night average sound level
L_{eq}	noise level equivalent
LOS	level of service
m	meters
mg/l	milligrams per liter
mgd	million gallons per day
ml	milliliters
MWD	Metropolitan Water District of Southern California
MWD	Metropolitan Water District of Southern California
NDDB	Natural Diversity Data Base
NHPA	National Historic Preservation Act
NO	nitric oxide
NO_2	nitrogen dioxides
NO_x	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
NSR	New Source Review
OEHHA	Office of Environmental Health Hazards Assessment
OES	Office of Emergency Services
PAHs	polynuclear aromatic hydrocarbons
PCE	perchloroethylene
PM10	fine particulate matter
POTWs	publicly owned treatment works
ppm	parts per million
ppt	parts per thousand
RACM	reasonably available control measures
RCRA	Resource Conservation and Recovery Act
ROG	reactive organic gases
SARA	Superfund Amendment Reauthorization Act
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SCE	Southern California Edison

SEA	Significant Ecological Area
SO_2	sulfur dioxide
SO_x	sulfur oxides
SR	State Route
SR 1	the Pacific Coast Highway
SR 19	Rosemead Boulevard
SR 60	Pomona Freeway
SR 57	Orange Freeway
SR 91	Artesia Freeway
SRF	state revolving fund
SWP	State Water Project
SWPPP	stormwater pollution prevention plan
SWRCB	California State Water Resources Control Board
TCE	trichloroethylene
TDM	transportation demand management
TDS	total dissolved solids
TICH	total identifiable chlorinated hydrocarbons
TSS	total suspended solids
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
USSCS	U.S. Soil Conservation Service
V/C	volume-to-capacity
VMT	vehicle miles traveled
VOC	volatile organic compound
Water Replenishment District	Water Replenishment District of Southern California
WDRs	waste discharge requirements
WNFCB	Whittier Narrows Flood Control Basin