

Water Words

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Imhoff cone:

A clear, cone-shaped container used to measure the volume of settleable solids in a specific volume of water.

Immiscibility:

The inability of two or more substances or liquids to readily dissolve into one another, such as soil and water.

Impaired waters:

A water body that has been determined under state and federal law as not meeting water quality standards, or having the potential to do so in the future. Impaired waters are included on California's 303(d) list.

Impermeable:

Not easily penetrated. The property of a material or soil that does not allow, or allows only with great difficulty, the movement or passage of water.

Impoundment:

A body of water or sludge confined by a dam, dike, floodgate, or other barrier.

In-line filtration:

Pretreatment method in which chemicals are mixed by flowing water; commonly used in pressure filtration installations.

In-situ flushing:

Introduction of large volumes of water, at times supplemented with cleaning compounds, into soil, waste, or groundwater to flush hazardous contaminants from a site.

In-situ oxidation:

Technology that oxidizes contaminants dissolved in groundwater, converting them into insoluble compounds.

In-situ stripping:

Treatment system that removes or strips volatile organic compounds from contaminated groundwater or surface water by forcing an air stream through the water and causing the compounds to evaporate.

In-situ vitrification:

Technology that treats contaminated soil in place at high temperatures, at 3,000 degrees Fahrenheit or more.

Indicator parameters:

Measurable physical or chemical characteristics or attributes of water or soil-pore moisture used to indicate the possible presence of waste constituents, or the effects of waste constituents on waters.

Industrial sludge:

Semi-liquid residue or slurry remaining from treatment of industrial water and wastewater.

Infiltration:

1. The penetration of water through the ground surface into sub-surface soil or the penetration of water from the soil into sewer or other pipes through defective joints, connections, or manhole walls; 2. the technique of applying large volumes of wastewater to land, to penetrate the surface and percolate through the underlying soil. (See Percolation)

Infiltration rate:

The quantity of water that can enter the soil in a specified time interval.

Inflow:

Entry of rainwater into a sewer system from sources other than infiltration, such as basement drains, manholes, storm drains, and street washing.

Influent:

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

Initial dilution:

The process that results in the rapid and irreversible turbulent mixing of effluent and receiving water around the point of discharge.

Injection well:

As defined by the U.S. EPA, any bored, drilled or driven shaft, dug pit or hole in the ground into which waste or fluid is discharged, and any associated subsurface appurtenances, the depth of which is greater than the largest surface dimension of the shaft, pit or hole. Injection wells are subject to U.S. EPA's Underground Injection Control (UIC) program.

Injection zone:

A geological formation receiving fluids through a well.

Instream use:

Used primarily in the Water Rights context, Water use taking place within a stream channel; e.g., navigation, water quality improvement, fish propagation, recreation.

Interceptor sewers:

Large sewer lines in a combined system that control the flow of sewage to the treatment plant. In a storm, they allow some of the sewage to flow directly into a receiving stream, thus keeping it from overflowing. Also used in separate systems to collect the flows from main and trunk sewers and carry them to treatment points.

Interface:

The common boundary between two substances such as water and a solid, water and a gas, or two liquids such as water and oil.

Interfacial tension:

The strength of the film separating two immiscible fluids (e.g., oil and water) measured in dynes per, or millidynes per, centimeter.

Interstate waters:

Waters that flow across or form part of state or international boundaries; e.g., the Great Lakes, the Mississippi River, or coastal waters.

Inert waste:

Waste that does not contain hazardous waste or soluble pollutants at concentrations in excess of applicable water quality objectives, and does not contain significant quantities of decomposable waste. This type of waste does not need to be discharged at classified waste management units.

Inland Surface Waters/Enclosed Bays and Estuaries Implementation Policy (SIP):

The Policy applies to Regional Water Quality Control Boards issuing, reissuing, and modifying federal wastewater discharge (NPDES) permits, except those for storm water discharges. The State Water Resources Control Board approved the supporting Functional Equivalent Document and adopted the Policy in March 2000 that establishes implementation provisions for U.S. EPA's California Toxics Rule, a list of priority pollutants and their associated water quality criteria.

Irrigated Lands Regulatory Program:

Water Board program regulating discharges from irrigated agriculture through conditional waivers of Waste Discharge Requirements.

Irrigation:

Applying water to land areas to supply the water and nutrient needs of plants.

Irrigation efficiency:

The amount of water stored in the crop root zone compared to the amount of irrigation water applied.

Irrigation return flow:

Surface and subsurface water which leaves the field following application of irrigation water.

Issue:

Discrepancy between the existing and the desired/expected condition or situation.