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http://www.epa.gov/OCEPAterms/

**Glossary: A**

**Abatement**: Reducing the degree or intensity of, or eliminating, pollution.

**Abatement Debris**: Waste from remediation activities.

**Acid**: A corrosive solution with a pH less than 7.

**Acid Mine Drainage**: Drainage of water from areas that have been mined for coal or other mineral ores. The water has a low pH because of its contact with sulfur-bearing material and is harmful to aquatic organisms.

**Acid Rain**: A complex chemical and atmospheric phenomenon that occurs when emissions of sulfur and nitrogen compounds and other substances are transformed by chemical processes in the atmosphere, often far from the original sources, and then deposited on earth in either wet or dry form. The wet forms, popularly called "acid rain," can fall to earth as rain, snow, or fog. The dry forms are acidic gases or particulates.

**Activated Sludge**: Product that results when primary effluent is mixed with bacteria-laden sludge and then agitated and aerated to promote biological treatment, speeding the breakdown of organic matter in raw sewage undergoing secondary waste treatment.

**Advanced Wastewater Treatment**: Any treatment of sewage that goes beyond the secondary or biological water treatment stage and includes the removal of nutrients such as phosphorus and nitrogen and a high percentage of suspended solids.

**Aerobic**: Life or processes that require, or are not destroyed by, the presence of oxygen.

**Aerobic Treatment**: Process by which microbes decompose complex organic compounds in the presence of oxygen and use the liberated energy for reproduction and growth. (Such processes include extended aeration, trickling filtration, and rotating biological contactors.)

**Algae**: Simple rootless plants that grow in sunlit waters in proportion to the amount of available nutrients. They can affect water quality adversely by lowering the dissolved oxygen in the water. They are food for fish and small aquatic animals.

**Algal Blooms**: Sudden spurts of algal growth, which can affect water quality adversely and indicate potentially hazardous changes in local water chemistry.

**Alkalinity**: The capacity of bases to neutralize acids. An example is lime added to lakes to decrease acidity.

**Anaerobic**: A life or process that occurs in, or is not destroyed by, the absence of oxygen.
**Anaerobic Decomposition**: Reduction of the net energy level and change in chemical composition of organic matter caused by microorganisms in an oxygen-free environment.

**Arid**: Describes regions where precipitation is insufficient in quantity for most crops and where agriculture is impractical without irrigation.

**Aqueous**: Something made up of water.

**Aquifer**: An underground geological formation, or group of formations, containing water. Are sources of groundwater for wells and springs.

**Artesian (Aquifer or Well)**: Water held under pressure in porous rock or soil confined by impermeable geological formations.

### Glossary: B

**Bacteria**: (Singular: bacterium) Microscopic living organisms that can aid in pollution control by metabolizing organic matter in sewage, oil spills or other pollutants. However, bacteria in soil, water or air can also cause human, animal and plant health problems.

**Bioaccumulants**: Substances that increase in concentration in living organisms as they take in contaminated air, water, or food because the substances are very slowly metabolized or excreted. (See: [biological magnification](#).)

**Bioassay**: A test to determine the relative strength of a substance by comparing its effect on a test organism with that of a standard preparation.

**Biochemical Oxygen Demand (BOD)**: A measure of the amount of oxygen consumed in the biological processes that break down organic matter in water. The greater the BOD, the greater the degree of pollution.

**Biodegradable**: Capable of decomposing under natural conditions.

**Biodiversity**: Refers to the variety and variability among living organisms and the ecological complexes in which they occur. Diversity can be defined as the number of different items and their relative frequencies. For biological diversity, these items are organized at many levels, ranging from complete ecosystems to the biochemical structures that are the molecular basis of heredity. Thus, the term encompasses different ecosystems, species, and genes.

**Biological Contaminants**: Living organisms or derivates (e.g. viruses, bacteria, fungi, and mammal and bird antigens) that can cause harmful health effects when inhaled, swallowed, or otherwise taken into the body.

**Biological Treatment**: A treatment technology that uses bacteria to consume organic waste.

**Biomass**: All of the living material in a given area; often refers to vegetation.
**Bioremediation**: Use of living organisms to clean up oil spills or remove other pollutants from soil, water, or wastewater; use of organisms such as non-harmful insects to remove agricultural pests or counteract diseases of trees, plants, and garden soil.

**Blackwater**: Water that contains animal, human, or food waste.

**Brackish**: Mixed fresh and salt water.

**Buffer**: A solution or liquid whose chemical makeup is such that it minimizes changes in pH when acids or bases are added to it.

**By-product**: Material, other than the principal product, generated as a consequence of an industrial process or as a breakdown product in a living system.

**Glossary: C**

**Carrier**: 1. The inert liquid or solid material in a pesticide product that serves as a delivery vehicle for the active ingredient. Carriers do not have toxic properties of their own. 2. Any material or system that can facilitate the movement of a pollutant into the body or cells.

**Chemical Oxygen Demand (COD)**: A measure of the oxygen required to oxidize all compounds, both organic and inorganic, in water.

**Chemical Treatment**: Any one of a variety of technologies that use chemicals or a variety of chemical processes to treat waste.

**Cistern**: Small tank or storage facility used to store water for a home or farm; often used to store rain water.

**Clarification**: Clearing action that occurs during wastewater treatment when solids settle out. This is often aided by centrifugal action and chemically induced coagulation in wastewater.

**Clarifier**: A tank in which solids settle to the bottom and are subsequently removed as sludge.

**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. (See: global warming.)

**Coliform Index**: A rating of the purity of water based on a count of fecal bacteria.

**Coliform Organism**: Microorganisms found in the intestinal tract of humans and animals. Their presence in water indicates fecal pollution and potentially adverse contamination by pathogens.
**Collector Sewers:** Pipes used to collect and carry wastewater from individual sources to an interceptor sewer that will carry it to a treatment facility.

**Colloids:** Very small, finely divided solids (that do not dissolve) that remain dispersed in a liquid for a long time due to their small size and electrical charge.

**Concentration:** The relative amount of a substance mixed with another substance. An example is five ppm of carbon monoxide in air or 1 mg/l of iron in water.

**Contaminant:** Any physical, chemical, biological, or radiological substance or matter that has an adverse effect on air, water, or soil.

**Contamination:** Introduction into water, air, and soil of microorganisms, chemicals, toxic substances, wastes, or wastewater in a concentration that makes the medium unfit for its next intended use. Also applies to surfaces of objects, buildings, and various household and agricultural use products.

**Corrosion:** The dissolution and wearing away of metal caused by a chemical reaction such as between water and the pipes, chemicals touching a metal surface, or contact between two metals.

**Glossary: D**

**Dam:** A structure of earth, rock, concrete, or other materials designed to retain water, creating a pond, lake, or reservoir.

**Decontamination:** Removal of harmful substances such as noxious chemicals, harmful bacteria or other organisms, or radioactive material from exposed individuals, rooms and furnishings in buildings, or the exterior environment.

**Delta:** A fan-shaped alluvial deposit at a river mouth formed by the deposition of successive layers of sediment.

**Desalination:** [Desalinization] (1) Removing salts from ocean or brackish water by using various technologies. (2) Removal of salts from soil by artificial means, usually leaching.

**Detection Limit:** The lowest concentration of a chemical that can reliably be distinguished from a zero concentration.

**Detention Time:** 1. The theoretical calculated time required for a small amount of water to pass through a tank at a given rate of flow. 2. The actual time that a small amount of water is in a settling basin, flocculating basin, or rapid-mix chamber. 3. In storage reservoirs, the length of time water will be held before being used.

**Detergent:** Synthetic washing agent that helps to remove dirt and oil. Some contain compounds which kill useful bacteria and encourage algae growth when they are in wastewater that reaches receiving waters.
**Dewater**: 1. Remove or separate a portion of the water in a sludge or slurry to dry the sludge so it can be handled and disposed of. 2. Remove or drain the water from a tank or trench.

**Direct Runoff**: Water that flows over the ground surface or through the ground directly into streams, rivers, and lakes.

**Discharge**: Flow of surface water in a stream or canal or the outflow of ground water from a flowing artesian well, ditch, or spring. Can also apply to discharge of liquid effluent from a facility or to chemical emissions into the air through designated venting mechanisms.

**Disposal**: Final placement or destruction of toxic, radioactive, or other wastes; surplus or banned pesticides or other chemicals; polluted soils; and drums containing hazardous materials from removal actions or accidental releases. Disposal may be accomplished through use of approved secure landfills, surface impoundments, land farming, deep-well injection, ocean dumping, or incineration.

**Dissolved Oxygen (DO)**: The oxygen freely available in water, vital to fish and other aquatic life and for the prevention of odors. DO levels are considered a most important indicator of a water body's ability to support desirable aquatic life. Secondary and advanced waste treatment are generally designed to ensure adequate DO in waste-receiving waters.

**Dissolved Solids**: Disintegrated organic and inorganic material in water. Excessive amounts make water unfit to drink or use in industrial processes.

**Drainage**: Improving the productivity of agricultural land by removing excess water from the soil by such means as ditches or subsurface drainage tiles.

**Drainage Basin**: The area of land that drains water, sediment, and dissolved materials to a common outlet at some point along a stream channel.

**Drainage Well**: A well drilled to carry excess water off agricultural fields. Because they act as a funnel from the surface to the groundwater below. Drainage wells can contribute to groundwater pollution.

**Glossary: E**

**Ecology**: The relationship of living things to one another and their environment, or the study of such relationships.

**Ecosystem**: The interacting system of a biological community and its non-living environmental surroundings.

**Effluent**: Wastewater--treated or untreated--that flows out of a treatment plant, sewer, or industrial outfall. Generally refers to wastes discharged into surface waters.

**Environment**: The sum of all external conditions affecting the life, development and survival of an organism.
**Environmental Assessment:** An environmental analysis prepared pursuant to the National Environmental Policy Act to determine whether a federal action would significantly affect the environment and thus require a more detailed environmental impact statement.

**Environmental Audit:** An independent assessment of the current status of a party's compliance with applicable environmental requirements or of a party's environmental compliance policies, practices, and controls.

**Environmental Exposure:** Human exposure to pollutants originating from facility emissions. Threshold levels are not necessarily surpassed, but low-level chronic pollutant exposure is one of the most common forms of environmental exposure (See: threshold level).

**Environmental Fate:** The destiny of a chemical or biological pollutant after release into the environment.

**Environmental Impact Statement:** A document required of federal agencies by the National Environmental Policy Act for major projects or legislative proposals significantly affecting the environment. A tool for decision making, it describes the positive and negative effects of the undertaking and cites alternative actions.

**Environmental Risk:** The potential for adverse effects on living organisms associated with pollution of the environment by effluents, emissions, wastes, or accidental chemical releases; energy use; or the depletion of natural resources.

**Environmental Sustainability:** Long-term maintenance of ecosystem components and functions for future generations.

**Estuary:** Regions of interaction between rivers and nearshore ocean waters, where tidal action and river flow create a mixing of fresh water and saltwater. These areas may include bays, mouths of rivers, salt marshes, and lagoons. These brackish water ecosystems shelter and feed marine life, birds, and wildlife.

**Eutrophication:** The slow aging process during which a lake, estuary, or bay evolves into a bog or marsh and eventually disappears. During the later stages of eutrophication the water body is choked by abundant plant life due to higher levels of nutritive compounds such as nitrogen and phosphorus. Human activities can accelerate the process.

**Glossary: F**

**Filtration:** A treatment process, under the control of qualified operators, for removing solid (particulate) matter from water by means of porous media such as sand or a man-made filter; often used to remove particles that contain pathogens.

**Flood:** The temporary inundation of normally dry land areas resulting from the overflowing of the natural or artificial confines of a river or other body of water.

**Flow Rate:** The rate, expressed in gallons -or liters-per-hour, at which a fluid escapes from a hole or fissure in a tank. Such measurements are also made of liquid waste, effluent, and surface water movement.
**Fresh Water:** Water that generally contains less than 1000 milligrams per litre of dissolved solids such as salts, metals, nutrients, etc.

**Glossary: G**

**Global Warming:** An increase in the near surface temperature of the Earth. Global warming has occurred in the distant past as the result of natural influences, but the term is most often used to refer to the warming predicted to occur as a result of increased emissions of greenhouse gases. Scientists generally agree that the Earth's surface has warmed by about 1 degree Fahrenheit in the past 140 years. The Intergovernmental Panel on Climate Change (IPCC) recently concluded that increased concentrations of greenhouse gases are causing an increase in the Earth's surface temperature and that increased concentrations of sulfate aerosols have led to relative cooling in some regions, generally over and downwind of heavily industrialized areas.

**Gray Water:** Domestic wastewater composed of wash water from kitchen, bathroom, and laundry sinks, tubs, and washers.

**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.

**Ground Water:** The supply of fresh water found beneath the Earth's surface, usually in aquifers, which supply wells and springs. Because ground water is a major source of drinking water, there is growing concern over contamination from leaching agricultural or industrial pollutants or leaking underground storage tanks.

**Glossary: H**

**Hard Water:** Alkaline water containing dissolved salts that interfere with some industrial processes and prevent soap from sudsing.

**Hazard:** 1. Potential for radiation, a chemical or other pollutant to cause human illness or injury. 2. In the pesticide program, the inherent toxicity of a compound. Hazard identification of a given substances is an informed judgment based on verifiable toxicity data from animal models or human studies.

**Hazardous Substance:** 1. Any material that poses a threat to human health and/or the environment. Typical hazardous substances are toxic, corrosive, ignitable, explosive, or chemically reactive. 2. Any substance designated by EPA to be reported if a designated quantity of the substance is spilled in the waters of the United States or is otherwise released into the environment.

**Hazardous Waste:** By-products of society that can pose a substantial or potential hazard to human health or the environment when improperly managed. Possesses at least one of four characteristics (ignitability, corrosivity, reactivity, or toxicity), or appears on special EPA lists.
Heavy Metals: Metallic elements with high atomic weights; (e.g. mercury, chromium, cadmium, arsenic, and lead); can damage living things at low concentrations and tend to accumulate in the food chain.

Hydrology: The science dealing with the properties, distribution, and circulation of water.

Hydrolysis: The decomposition of organic compounds by interaction with water.

Hydrophilic: Having a strong affinity for water.

Hydrophobic: Having a strong aversion for water.

Glossary: I

In Situ: In its original place; unmoved unexcavated; remaining at the site or in the subsurface.

Inflow: Entry of extraneous rain water 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.

Irrigation: Applying water or wastewater to land areas to supply the water and nutrient needs of plants.

Glossary: L

Lagoon: 1. A shallow pond where sunlight, bacterial action, and oxygen work to purify wastewater; also used for storage of wastewater or spent nuclear fuel rods. 2. Shallow body of water, often separated from the sea by coral reefs or sandbars.

Leachate: Water that collects contaminants as it trickles through wastes, pesticides or fertilizers. Leaching may occur in farming areas, feedlots, and landfills, and may result in hazardous substances entering surface water, ground water, or soil.

Limnology: The study of the physical, chemical, hydrological, and biological aspects of fresh water bodies.

Glossary: M

Maximum Acceptable Toxic Concentration: For a given ecological effects test, the range (or geometric mean) between the No Observable Adverse Effect Level and the Lowest Observable Adverse Effects Level.

Maximum Contaminant Level: The maximum permissible level of a contaminant in water delivered to any user of a public system. MCLs are enforceable standards.
**Mesotrophic**: Reservoirs and lakes which contain moderate quantities of nutrients and are moderately productive in terms of aquatic animal and plant life.

**Mining of an Aquifer**: Withdrawal over a period of time of ground water that exceeds the rate of recharge of the aquifer.

**Mitigation**: Measures taken to reduce adverse impacts on the environment.

**Monitoring**: Periodic or continuous surveillance or testing to determine the level of compliance with statutory requirements and/or pollutant levels in various media.

**Monitoring Well**: 1. A well used to obtain water quality samples or measure groundwater levels. 2. A well drilled at a hazardous waste management facility or Superfund site to collect ground-water samples for the purpose of physical, chemical, or biological analysis to determine the amounts, types, and distribution of contaminants in the groundwater beneath the site.

**Municipal Discharge**: Discharge of effluent from waste water treatment plants which receive waste water from households, commercial establishments, and industries in the coastal drainage basin. Combined sewer/separate storm overflows are included in this category.

**Municipal Sewage**: Wastes (mostly liquid) originating from a community; may be composed of domestic wastewaters and/or industrial discharges.

**Glossary: N**

**Neutralization**: Decreasing the acidity or alkalinity of a substance by adding alkaline or acidic materials, respectively.

**Non-Point Sources**: Diffuse pollution sources (i.e. without a single point of origin or not introduced into a receiving stream from a specific outlet). The pollutants are generally carried off the land by storm water. Common non-point sources are agriculture, forestry, urban, mining, construction, dams, channels, land disposal, saltwater intrusion, and city streets.

**Non-potable**: Water that is unsafe or unpalatable to drink because it contains pollutants, contaminants, minerals, or infective agents.

**Non-renewable Resources**: Natural resources that can be used up completely or else used up to such a degree that it is economically impractical to obtain any more of them; e.g., coal, crude oil, and metal ores.

**Nutrient**: Any substance assimilated by living things that promotes growth. The term is generally applied to nitrogen and phosphorus in wastewater, but is also applied to other essential and trace elements.

**Nutrient Pollution**: Contamination of water resources by excessive inputs of nutrients. In surface waters, excess algal production is a major concern.
Glossary: O

**Oligotrophic Lakes:** Deep clear lakes with few nutrients, little organic matter and a high dissolved-oxygen level.

**Organic Matter:** Carbonaceous waste contained in plant or animal matter and originating from domestic or industrial sources.

**Osmosis:** The passage of a liquid from a weak solution to a more concentrated solution across a semipermeable membrane that allows passage of the solvent (water) but not the dissolved solids.

**Outfall:** The place where effluent is discharged into receiving waters.

**Ozonation/Ozonator:** Application of ozone to water for disinfection or for taste and odor control. The ozonator is the device that does this.

Glossary: P

**Pathogens:** Microorganisms (e.g., bacteria, viruses, or parasites) that can cause disease in humans, animals and plants.

**Peak Levels:** Levels of airborne pollutant contaminants much higher than average or occurring for short periods of time in response to sudden releases.

**Percolation:** 1. The movement of water downward and radially through subsurface soil layers, usually continuing downward to ground water. Can also involve upward movement of water. 2. Slow seepage of water through a filter.

**Permeability:** The rate at which liquids pass through soil or other materials in a specified direction.

**pH:** An expression of the intensity of the basic or acid condition of a liquid; may range from 0 to 14, where 0 is the most acid and 7 is neutral. Natural waters usually have a pH between 6.5 and 8.5.

**Physical and Chemical Treatment:** Processes generally used in large-scale wastewater treatment facilities. Physical processes may include air-stripping or filtration. Chemical treatment includes coagulation, chlorination, or ozonation. The term can also refer to treatment of toxic materials in surface and ground waters, oil spills, and some methods of dealing with hazardous materials on or in the ground.

**Point Source:** A stationary location or fixed facility from which pollutants are discharged; any single identifiable source of pollution; e.g. a pipe, ditch, ship, ore pit, factory smokestack.

**Pollutant:** Generally, any substance introduced into the environment that adversely affects the usefulness of a resource or the health of humans, animals, or ecosystems.
Pollution: Generally, the presence of a substance in the environment that because of its chemical composition or quantity prevents the functioning of natural processes and produces undesirable environmental and health effects. Under the Clean Water Act, for example, the term has been defined as the man-made or man-induced alteration of the physical, biological, chemical, and radiological integrity of water and other media.

Potable Water: Water that is safe for drinking and cooking.

Precipitation: Water falling, in a liquid or solid state, from the atmosphere to a land or water surface.

Primary Treatment: First stage of wastewater treatment in which solids are removed by screening and settling.

Process Wastewater: Any water that comes into contact with any raw material, product, byproduct, or waste.

Glossary: R

Raw Sewage: Untreated wastewater and its contents.

Receiving Waters: A river, lake, ocean, stream or other watercourse into which wastewater or treated effluent is discharged

Recharge: The process by which water is added to a zone of saturation, usually by percolation from the soil surface; e.g., the recharge of an aquifer.

Reclamation: (In recycling) Restoration of materials found in the waste stream to a beneficial use which may be for purposes other than the original use.

Recycle/Reuse: Minimizing waste generation by recovering and reprocessing usable products that might otherwise become waste (i.e. recycling of aluminum cans, paper, and bottles, etc.).

Remediation: 1. Cleanup or other methods used to remove or contain a toxic spill or hazardous materials from a Superfund site; 2. for the Asbestos Hazard Emergency Response program, abatement methods including evaluation, repair, enclosure, encapsulation, or removal of greater than 3 linear feet or square feet of asbestos-containing materials from a building.

Reservoir: Any natural or artificial holding area used to store, regulate, or control water.

Residual: Amount of a pollutant remaining in the environment after a natural or technological process has taken place; e.g., the sludge remaining after initial wastewater treatment, or particulates remaining in air after it passes through a scrubbing or other process.

Reverse Osmosis: A treatment process used in water systems by adding pressure to force water through a semi-permeable membrane. Reverse osmosis removes most drinking water contaminants. Also used in wastewater treatment. Large-scale reverse osmosis plants are being developed.
Run-Off: That part of precipitation, snow melt, or irrigation water that runs off the land into streams or other surface-water. It can carry pollutants from the air and land into receiving waters.

Glossary: S

**Safe Water:** Water that does not contain harmful bacteria, toxic materials, or chemicals, and is considered safe for drinking even if it may have taste, odor, color, and certain mineral problems.

**Salinity:** The percentage of salt in water.

**Salt Water Intrusion:** The invasion of fresh surface or ground water by salt water. If it comes from the ocean it may be called sea water intrusion.

**Sanitary Sewers:** Underground pipes that carry off only domestic or industrial waste, not storm water.

**Sanitation:** Control of physical factors in the human environment that could harm development, health, or survival.

**Saturation:** The condition of a liquid when it has taken into solution the maximum possible quantity of a given substance at a given temperature and pressure.

**Secondary Treatment:** The second step in most publicly owned waste treatment systems in which bacteria consume the organic parts of the waste. It is accomplished by bringing together waste, bacteria, and oxygen in trickling filters or in the activated sludge process. This treatment removes floating and settleable solids and about 90 percent of the oxygen-demanding substances and suspended solids. Disinfection is the final stage of secondary treatment. (See: primary, tertiary treatment.)

**Septic System:** An on-site system designed to treat and dispose of domestic sewage. A typical septic system consists of a tank that receives waste from a residence or business and a system of tile lines or a pit for disposal of the liquid effluent (sludge) that remains after decomposition of the solids by bacteria in the tank and must be pumped out periodically.

**Septic Tank:** An underground storage tank for wastes from homes not connected to a sewer line. Waste goes directly from the home to the tank. (See: septic system.)

**Sewage:** The waste and wastewater produced by residential and commercial sources and discharged into sewers.

**Sewer:** A channel or conduit that carries wastewater and storm-water runoff from the source to a treatment plant or receiving stream. "Sanitary" sewers carry household, industrial, and commercial waste. "Storm" sewers carry runoff from rain or snow. "Combined" sewers handle both.

**Sewerage:** The entire system of sewage collection, treatment, and disposal.
Soft Water: Any water that does not contain a significant amount of dissolved minerals such as salts of calcium or magnesium.

Standards: Norms that impose limits on the amount of pollutants or emissions produced. EPA establishes minimum standards, but states are allowed to be stricter.

Surface Runoff: Precipitation, snow melt, or irrigation water in excess of what can infiltrate the soil surface and be stored in small surface depressions; a major transporter of non-point source pollutants in rivers, streams, and lakes.

Surface Water: All water naturally open to the atmosphere (rivers, lakes, reservoirs, ponds, streams, impoundments, seas, estuaries, etc.)

Surfactant: A detergent compound that promotes lathering.

Suspended Solids: Small particles of solid pollutants that float on the surface of, or are suspended in, sewage or other liquids. They resist removal by conventional means.

**Glossary: T**

Tertiary Treatment: Advanced cleaning of wastewater that goes beyond the secondary or biological stage, removing nutrients such as phosphorus, nitrogen, and most BOD and suspended solids.

Thropic Levels: A functional classification of species that is based on feeding relationships (e.g. generally aquatic and terrestrial green plants comprise the first thropic level, and herbivores comprise the second.)

Toxic Concentration: The concentration at which a substance produces a toxic effect.

Toxic Dose: The dose level at which a substance produces a toxic effect.

Toxic Pollutants: Materials that cause death, disease, or birth defects in organisms that ingest or absorb them. The quantities and exposures necessary to cause these effects can vary widely.

Toxic Substance: A chemical or mixture that may present an unreasonable risk of injury to health or the environment.

Toxic Waste: A waste that can produce injury if inhaled, swallowed, or absorbed through the skin.

Toxicity: The degree to which a substance or mixture of substances can harm humans or animals. *Acute toxicity* involves harmful effects in an organism through a single or short-term exposure. *Chronic toxicity* is the ability of a substance or mixture of substances to cause harmful effects over an extended period, usually upon repeated or continuous exposure sometimes lasting for the entire life of the exposed organism. *Subchronic toxicity* is the ability of the substance to cause effects for more than one year but less than the lifetime of the exposed organism.
**Treated Wastewater:** Wastewater that has been subjected to one or more physical, chemical, and biological processes to reduce its potential of being health hazard.

**Treatment:** (1) Any method, technique, or process designed to remove solids and/or pollutants from solid waste, waste-streams, effluents, and air emissions. (2) Methods used to change the biological character or composition of any regulated medical waste so as to substantially reduce or eliminate its potential for causing disease.

**Treatment Plant:** A structure built to treat wastewater before discharging it into the environment.

**Glossary: U**

**Urban Runoff:** Storm water from city streets and adjacent domestic or commercial properties that carries pollutants of various kinds into the sewer systems and receiving waters.

**Glossary: W**

**Waste:** 1. Unwanted materials left over from a manufacturing process. 2. Refuse from places of human or animal habitation.

**Waste Treatment Plant:** A facility containing a series of tanks, screens, filters and other processes by which pollutants are removed from water.

**Wastewater:** The spent or used water from a home, community, farm, or industry that contains dissolved or suspended matter. Water Pollution: The presence in water of enough harmful or objectionable material to damage the water's quality.

**Water Quality Criteria:** Levels of water quality expected to render a body of water suitable for its designated use. Criteria are based on specific levels of pollutants that would make the water harmful if used for drinking, swimming, farming, fish production, or industrial processes.

**Water Quality Standards:** State-adopted and EPA-approved ambient standards for water bodies. The standards prescribe the use of the water body and establish the water quality criteria that must be met to protect designated uses.

**Water Supply System:** The collection, treatment, storage, and distribution of potable water from source to consumer.

**Water Table:** The level of groundwater.

**Watershed:** The land area that drains into a stream; the watershed for a major river may encompass a number of smaller watersheds that ultimately combine at a common point.

**Well:** A bored, drilled, or driven shaft, or a dug hole whose depth is greater than the largest surface dimension and whose purpose is to reach underground water supplies or oil, or to store or bury fluids below ground.
**Wetlands:** An area that is saturated by surface or ground water with vegetation adapted for life under those soil conditions, as swamps, bogs, fens, marshes, and estuaries.

**Glossary: Y**

**Yield:** The quantity of water (expressed as a rate of flow or total quantity per year) that can be collected for a given use from surface or groundwater sources.