

# Glossary

*Accidental poisoning:* When any substance interferes with normal body functions after it is inadvertently swallowed, inhaled, or absorbed.

*Bacteria:* Microscopic 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.

*Bioaccumulation:* The increase in concentration of a substance in an organism over time; i.e.; a general term for the accumulation of substances, such as pesticides, methylmercury, or other organic chemicals in an organism or part of an organism. Bioaccumulative substances tend to be fat soluble and not to be broken down by the organism.

*Biodegradation:* Decomposition or breakdown of a substance through the action of microorganisms (such as bacteria or fungi) or other natural physical processes (such as sunlight).

*Biomagnification:* the concentration of toxins in an organism as a result of its ingesting other plants or animals in which the toxins are more widely disbursed.

*Biota:* Plants and animals in an environment. Some of these plants and animals might be sources of food, clothing, or medicines for people.

*Chemical compound:* A distinct and pure substance formed by the union of two or more elements in definite proportion by weight.

*Chemical load:* The amount of harmful chemicals present in a person's body.

*Chronic exposure:* Repeated, continuous exposure to a hazardous substance over an extended period.

*Collection programs:* Organized opportunities for people to turn in unwanted medications for proper disposal to improve public safety and ecosystem health.

*Community stewardship:* An ethic that embodies the responsibility of cooperative planning and management of resources; for organizations and communities to actively engage in the development and maintenance of its people, property, and financial assets. Relates to the care and/or management of resources for which one has no ownership.

*Concentration:* The amount of a substance present in a certain amount of soil, water, air, food, blood, hair, urine, breath, or any other media.

*Contaminant:* A substance that is either present in an environment where it does not belong or is present at levels that might cause harmful (adverse) health effects.

*Contamination:* Introduction of chemicals, toxic substances, wastes, or wastewater into water, air, and soil in a concentration that makes the medium unfit for its next intended use.

*Controlled substance:* A drug or chemical whose manufacture, possession, and use are regulated by a government.

*Direct disposal of unwanted medicine:* The disposal of pharmaceuticals directly to a sewage system or landfill by flushing, pouring down a sink, or discarding in the trash.

*Discharge:* The amount of water flowing through a river or aquifer.

*Domestic Wastewater:* Used water from houses and apartments; it is also called sanitary sewage.

*Ecological harm:* This occurs when an action results in habitat alteration and degradation or directly harms native animals, such as altering the endocrine system of species.

*Ecosystem:* The interacting system of a biological community (plants, animals) and its non-living environment.

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

*Endocrine disruptors:* Chemicals that may interfere with the body's endocrine system and produce adverse developmental, reproductive, neurological, and immune effects in both humans and wildlife.

*Environmental education:* Organized efforts to teach how natural environments function and, particularly, how humans can interact sustainably with their environments.

*Environmental hazard:* Any situations or events that poses a threat to the surrounding environment.

*Environmental health:* Aggregate of conditions, forces, and substances in an environment that affect the physical and mental well being of the people living in it.

*Environmental impact:* Possible adverse effects caused by the release of substances in the environment, which may be due to industry as well as building or infrastructure projects.

*Environmental persistence:* The ability of a chemical substance to remain in an unchanged form. The longer a chemical persists, the higher the potential for human or environmental exposure.

*Excretion:* The elimination of waste material from the body.

*Exposure pathway:* The route a substance takes from its source to its end point. This includes how people or wildlife come into contact with or get exposed to the substance.

*Feminization of fish:* This occurs when compounds released into water systems affect how male fish develop, causing them to produce eggs.

*Groundwater:* The supply of freshwater under the Earth's surface in an aquifer or soil.

*Habitat:* Specific environment in which an organism lives, which provides food and shelter to sustain the organism.

*Hazardous waste disposal:* The act of safely discarding any solid, liquid, or gaseous waste materials that, if improperly managed or disposed of, may pose substantial hazards to human health and the environment.

*Health risks:* Any factor that increases the chance of disease or injury.

*Identity theft:* Obtaining a person's personal and financial information through criminal means.

*Industrial wastewater:* A group of unit processes designed to separate, modify, remove, and destroy undesirable substances carried by wastewater from industrial sources.

*Inert ingredient:* Pesticide components such as solvents, carriers, dispersants, and surfactants, which are not active against target pests. Not all inert ingredients are innocuous.

*Life-cycle assessment:* A technique to assess the environmental aspects and potential impacts associated with a product, process, or service, by compiling an inventory of relevant material inputs and environmental releases and evaluating the potential environmental impacts associated with identified inputs and releases.

*Medicine take-back programs:* A way for consumers to return unused or unwanted medications to a pharmacy or other collection location for proper disposal.

*Monitor:* To measure a characteristic, such as the population of aquatic life, using uniform methods to assess change over time.

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

*Nonpoint source pollution:* Diffuse toxic waste, generated from large areas with no particular point of contaminant origin, but rather from many places.

*Personal care products:* A diverse set of products that includes cosmetics and items for personal hygiene.

*Pharmaceutical:* Drug or medicine that is prepared or dispensed in pharmacies and used in medical treatment.

*Pharmacokinetics:* The branch of pharmacology concerned with the movement of drugs within the body.

*Point source pollution:* A discharge of water contaminant to a stream or other body of water via an identifiable pipe, vent, or culvert.

*Precautionary principle:* The introduction of a new product or process where the ultimate effects are disputed or unknown should be resisted. It has mainly been used to prohibit the importation of genetically modified organisms and food.

*Prescription drug:* A drug that can be obtained only by means of a physician's prescription.

*Resource Conservation and Recovery Act:* A federal law controlling the management and disposal of solid and hazardous wastes that are produced by a wide variety of industries and sources. The law regulates hazardous pharmaceutical wastes produced by manufacturers and the health care industry.

*Reverse distribution:* Collecting damaged, outdated, or unsold goods and bringing them back to the supplier or manufacturer.

*Sampling:* The process of taking a portion of water for analysis or other testing.

*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 liquid effluent (sludge), which remains after decomposition of the solids by bacteria. The tank and must be pumped out periodically.

*Service learning:* A method of teaching, learning, and reflecting that combines academic classroom curriculum with meaningful service in the community.

*Toxic:* Able to poison or harm an organism. Toxic substances can cause adverse health effects.

*Unintended consequences:* Outcomes that are not the ones intended by a purposeful action.

*Unwanted medicine:* Unused prescriptions or over-the-counter medications that are expired or no longer needed.

*Wastewater treatment:* Process that modifies wastewater characteristics such as biological oxygen demand (BOD), chemical oxygen demand (COD), pH, etc., to meet effluent standards.