Glossary of Terms

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.

- **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 (*greenhouse effect).*

coastal zone - Lands and waters adjacent to the coast that exert an influence on the uses of the sea and its ecology, or whose uses and ecology are affected by the sea.

coliform bacteria - A group of bacteria that mostly inhabits the intestinal tract of humans and animals, but also found in soil. While harmless in themselves, coliform bacteria are used as indicators of the possible presence of pathogenic organisms. therefore, the *coliform index* is a rating of the purity of water based upon a count of fecal bactera.

colloid - Particles so small that they do not settle gravitationally, but are kept suspended by Brownian motion. For colloids in water, they range in size from 10-9 to 10-6 m (or 10-3 to 1 microns).

combined sewer overflows - Discharge of a mixture of storm water and domestic waste when the flow capacity of a sewer system is exceeded during rainstorms.

combined sewers - A sewer system that carries both sewage and storm-water runoff. Normally, its entire flow goes to a waste treatment plant, but during a heavy storm, the volume of water may be so great as to cause overflows of untreated mixtures of storm water and sewage into receiving waters. Storm-water runoff may also carry toxic chemicals from industrial areas or streets into the sewer system.

comparative risk assessment - Process that generally uses the judgment of experts to predict effects and set priorities among a wide range of environmental problems.

compost - The relatively stable humus material that is produced from a composting process in which bacteria in soil mixed with garbage and degradable trash break down the mixture into organic fertilizer.

conductance - A rapid method of estimating the dissolved solids content of water supply by determining the capacity of a water sample to carry an electrical current. Conductivity is a measure of the ability of a solution to carry and electrical current.

conservation - Preserving and renewing, when possible, human and natural resources. The use, protection, and improvement of natural resources according to principles that will ensure their highest economic or social benefits.

conservation solute - A non-reactive constituent that does not undergo chemical reduction.

constituent(s) of concern - Specific chemicals that are identified for evaluation in the site assessment process

consumptive use - That part of water withdrawn that is evaporated, transpired by plants, incorporated into products or crops, consumed by humans or livestock, or otherwise removed from the immediate water environment. Also referred to as water consumed.

contamination - The degradation of natural water quality as a result of man's activities. There is no implication of any specific limits, since the degree of permissible contamination depends upon the intended end use of the water.

corrective action - EPA can require treatment, storage and disposal (TSDF) facilities handling hazardous waste to undertake corrective actions to clean up spills resulting from failure to follow hazardous waste management procedures or other mistakes.

cryptosporidium - A protozoan microbe associated with the disease cryptosporidiosis in man. The disease can be transmitted through ingestion of drinking water, person-to-person contact, or other pathways, and can cause acute diarrhea, abdominal pain, vomiting, fever, and can be fatal as it was in the Milwaukee episode.

decomposition - The breakdown of matter by bacteria and fungi, changing the chemical makeup and physical appearance of materials.

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.

DDT - The first chlorinated hydrocarbon insecticide chemical name: Dichloro-Diphenyl-Trichloroethane). It has a half-life of 15 years and can collect in fatty tissues of certain animals. EPA banned registration and interstate sale of DDT for virtually all but emergency uses in the United States in 1972 because of its persistence in the environment and accumulation in the food chain.

degradation - To wear down, reduce to lower quality, by erosion or reduce the complexity of a chemical compound

diffusion - The movement of suspended or dissolved particles (or molecules) from a more concentrated to a less concentrated area. The process tends to distribute the particles or molecules more uniformly.

dioxin - Any of a family of compounds known chemically as dibenzo-p-dioxins. Concern about them arises from their potential toxicity as contaminants in commercial products. Tests on laboratory animals indicate that it is one of the more toxic anthropogenic (man-made) compounds.

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. .

diversion - 1. Use of part of a stream flow as water supply. 2. A channel with a supporting ridge on the lower side constructed across a slope to divert water at a non-erosive velocity to sites where it can be used and disposed of.

divide - A topographic high (or ridge) separating surface watersheds (catchments).

domestic water use - Water used for household purposes, such as drinking, food preparation, bathing, washing clothes, dishes, and dogs, flushing toilets, and watering lawns and gardens

drainage basin - Land area where precipitation runs off into streams, rivers, lakes, and reservoirs. Also called a *watershed*.

drought - A prolonged period of low (lower than average) rainfall.

drinking water equivalent level - Protective level of exposure related to potentially non-carcinogenic effects of chemicals that are also known to cause cancer.

ecological impact - The effect that a man-caused or natural activity has on living organisms and their non-living (abiotic) environment.