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Glossary

Note. Words underlined are also explained in this glossary.

biofiltration A conventional treatment process for wastewater, also known as the trickling filter, in which the wastewater trickles through a well ventilated bed of coarse material.

BOD Biochemical oxygen demand, a measure of the amount of organic matter in wastewater.

burden The number of parasitic worms with which a person is infected. This is also called the intensity of infection.

compost The humus-like product of the decomposition of excreta mixed with organic material rich in carbon.

deputation The practice of transferring fish to an unfertilized pond for a short period before harvesting.

desludge Remove accumulated sludge from septic tanks, etc.

ditch, oxidation A channel, also known as the Pasveer ditch, in which wastewater circulates in the course of the treatment process and is aerated by a large rotor.

dose, infectious The number of pathogens that must simultaneously enter the body, on average, to cause infection.

effluent Outflowing liquid. Treated effluent flows out from a wastewater treatment plant.

emitter The small aperture from which water is applied to each plant in localized irrigation.

eutrophication The enrichment of natural waters, especially by compounds of nitrogen and phosphorus, resulting in increased productivity of some species of plants.

evapotranspiration The movement of water drawn up by plant roots and its evaporation from leaves and the soil.

excreta Faeces and urine. In these Guidelines the term is used also to refer to sludge, septage and nightsoil.

exposure control Measures taken to ensure that a potential risk posed by pathogens in the environment does not cause an actual risk of disease.

feedlot A piece of land set aside for the feeding of animals.

filter, trickling see biofiltration.

helminth A worm; the helminths discussed in these Guidelines are parasitic worms, e.g. *Ascaris*, *Schistosoma* and *Taenia*.

- hydrogeology** The study of the presence and movement of water in the ground.
- incidence** The number of cases of a specified disease diagnosed or reported during a defined period of time, divided by the number of persons at risk in the population in which the disease occurred.
- indicator organism** An indicator organism is one whose presence indicates a potential risk from one or more species of pathogen.
- intensity** The intensity of infection with a parasitic worm is the same as the worm burden.
- irrigation, border** An irrigation technique by which water is admitted to the top end of a sloping strip of land and allowed to flow evenly across the full width of the strip.
- irrigation, localized** Irrigation by a system that applies water directly to individual plants.
- lagoon, aerated** An adaptation of the waste stabilization pond, in which oxygen is added by mechanical aerators.
- latent** The latent period of a pathogen is the time it requires to develop in the environment before it can cause infection.
- latrine, pour-flush** A latrine with a water seal but which can be flushed with a small amount of water poured by hand.
- latrine, twin pit** A form of pit latrine with two pits, which are used alternately to facilitate emptying.
- leaching** The draining of water through soil or other material, carrying soluble salts with it in dissolved form.
- loading** The loading of a wastewater treatment system is the rate at which wastewater or BOD is fed into it.
- macrophyte** Any plant visible to the naked eye; aquatic macrophytes float on water.
- mean, geometric** The mean calculated on a logarithmic scale.
- mesophilic** Mesophilic bacteria are those whose optimum temperature for growth is between 20 °C and 40 °C.
- nematode** A roundworm of the class Nematoda, e.g. *Ascaris*.
- nightsoil** Human excreta transported without flushing water.
- phytotoxin** Any substance poisonous to plants.
- polyculture** The production of several fish species in a single pond.
- pond, facultative** A pond that is aerobic near the surface but anaerobic lower down.
- pond, maturation** The final pond(s) in a series of waste stabilization ponds. Maturation ponds are entirely aerobic.
- pond, stabilization** A pond for the treatment of wastewater. Ponds are usually connected in series, with a total retention time of one or more weeks.
- prevalence** The number of persons sick or exhibiting a certain

- condition at a particular time (regardless of when that illness or condition began) divided by the number of persons at risk in the population in which it occurred.
- refuse** Rubbish or garbage; solid waste.
- retention time** The period of time wastewater takes to pass through a pond or other treatment process, calculated by dividing its volume by the flow of wastewater.
- riparian** Relating to the ownership of a stretch of river bank.
- risk, actual** Probability of an individual's developing a particular disease over a specified period.
- risk, potential** The chance of infection or disease that might occur but that does not at present occur.
- salinization** Excessive accumulation of salt.
- sedimentation** The process by which suspended solid particles in water or sewage are allowed to settle out to the bottom of a tank or pond.
- septage** Sludge removed from septic tanks.
- settleable** Capable of removal by sedimentation.
- sewage** Human excreta and wastewater, flushed along a sewer pipe.
- sewer** A pipe containing wastewater or sewage.
- sewerage** A system of sewer pipes.
- sludge** A mixture of solids and water deposited on the bottom of septic tanks, ponds, etc.
- sludge, activated** A common method of biological sewage treatment. Settled sewage is supplied either by mechanical agitation or by diffused aeration. The bacteria that grow in the medium, together with other solids, are removed as a sludge in a secondary sedimentation tank and recycled to the aeration tank inlet.
- soakaway** An arrangement to promote seepage of effluent into the ground.
- sodicity** Concentration of sodium.
- sprinkler** An irrigation device that applies water by spraying it over the ground.
- thermophilic** Thermophilic bacteria are those whose optimum temperature for growth is over 45 °C.
- treatment, conventional** This terms refers to the wastewater treatment processes routinely used in Europe, including bio-filtration, activated sludge and oxidation ditches. The retention time of these processes is normally no more than a few hours.
- trematode** Flat worms of the class Trematoda, including the parasitic worms called flukes. Trematodes of medical importance have intermediate stages in snails, e.g. *Schistosoma*.

wastewater In these Guidelines, wastewater refers to the liquid waste discharged from homes, commercial premises and similar sources to individual disposal systems or to municipal sewer pipes, and consists mainly of human excreta and used water. It may contain small amounts of industrial waste, but the consequences of this are not considered in these Guidelines.

windrow A long pile of solid material undergoing composting. The pile is usually turned at intervals in order to aerate it.