

WASTEWATER

Wastewater, also written as waste water, is any water that has been adversely affected in quality by anthropogenic influence. Municipal wastewater is usually conveyed in a combined sewer or sanitary sewer, and treated at a wastewater treatment plant. Treated wastewater is discharged into receiving water via an effluent sewer. Wastewaters generated in areas without access to centralized sewer systems rely on on-site wastewater systems. These typically comprise a septic tank, drain field, and optionally an on-site treatment unit. The management of wastewater belongs to the overarching term sanitation, just like the management of human excreta, solid waste and storm water (drainage).

Sewage is the subset of wastewater that is contaminated with feces or urine, but is often used to mean any wastewater. Sewage includes domestic, municipal, or industrial liquid waste products disposed of, usually via a pipe or sewer (sanitary or combined), sometimes in a cess-pool emptier.

Sewerage is the physical infrastructure, including pipes, pumps, screens, channels etc. used to convey sewage from its origin to the point of eventual treatment or disposal. It is found in all types of sewage treatment, with the exception of septic systems, which treat sewage on site.

In some urban areas, sewage is carried separately in sanitary sew-ers and runoff from streets is carried in storm drains. Access to either of these is typically through a manhole. During high precipitation pe-riods a combined sewer overflow can occur, forcing untreated sewage to flow back into the environment. This can pose a serious threat to public health and the surrounding environment.

Sewage may drain directly into major watersheds with minimal or no treatment. When untreated, sewage can have serious impacts on the quality of an environment and on the health of people. Pathogens can cause a variety of illnesses. Some chemicals pose risks even at 231 very low concentrations and can remain a threat for long periods of time because of bioaccumulation in animal or human tissue.

I. Read the text and answer the questions.

1. Where is wastewater usually conveyed and treated?
2. How is treated wastewater discharged into receiving water?
3. What do on-site wastewater systems typically comprise?
4. Who does management of wastewater belong to?
5. What is sewerage?

II. Determine which sentences are a) correct (t), b) which are not (f), c) there is no information.

1. Waste water is any water that has been used in vain.
2. Municipal wastewater is usually conveyed in an effluent sewer.
3. Wastewaters generated in areas without access to centralized sewer systems rely on onsite wastewater systems.
4. Sewerage is the physical infrastructure, including pipes, pumps, screens, channels etc.
5. When untreated, sewage does not have serious impacts on the quality of an environment and on the health of people.

III. Find the paragraph that contains the information:

What does sewerage include?