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WASTEWATER TREATMENT

Wastewater treatment is the process of converting wastewater – water that is no longer needed or is no longer suitable for use – into bilge water that can be discharged back into the environment. It's formed by a number of activities including bathing, washing, using the toilet, and rainwater runoff. Wastewater is full of contaminants including bacteria, chemicals and other toxins. Its treatment aims at reducing the contaminants to acceptable levels to make the water safe for discharge back into the environment.

In order for the waste water to become safe, it is necessary to recycle them in a special way, subjecting them to treatment of various degrees and depths in order to avoid negative environmental impact. Wastewater drivers are diverted from territorial industrial enterprises and settlements through the sewer system or left where they seek wastewater treatment before it enters the water sources.

Mechanically cleaned first, it is used to trap solids and debris with grilles and sieves. Further, small particles are deposited by gravity.

Grease traps are part of the physical and chemical purification in which the removal of hydrophobic substances from the surface of the water by flotation is taken place [2].

Biological wastewater treatment is an effective way to remove organic impurities from water. Water treatment is carried out using two types of bacteria, they are aerobic and anaerobic. Aerobic microorganisms require oxygen to function. Anaerobic bacteria can work in a closed system without air access. Anaerobic treatment of industrial wastewater is a specific type of treatment and is designed for effluents that are rich in organic substances. In this way, not only purified water is obtained, but also biogas, which can subsequently be converted into thermal or electric energy.

Wastewater disinfection may be the last stage of treatment before discharging water to the terrain or in the reservoir, this treatment is carried out using the installation of ultraviolet radiation or treatment with chlorine for 30 minutes [1].

If we adhere to all the norms and rules of wastewater treatment, then after all stages of treatment they will become clean water, which is ready to fall back into the pipes of our houses, rivers, seas and other water sources without any environmental danger.

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