

The use of coagulation and reverse osmosis for petroleum hydrocarbons removal from water

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ABSTRACT

Petroleum compounds appear in the surface and ground water in increasing concentrations. This is due to the emergence of new risks associated with the production, transport, use, and disposal of hazardous waste substances. These pollutants have a strong toxic impact on living organisms, hence they should be removed using the most effective methods. The paper deals with the removal of petroleum compounds from water using a combination of classical and membrane methods. Coagulation and reverse osmosis were applied. The study used synthetic water, that is, distilled water enriched with a mixture of diesel fuel and gasoline.

Keywords: Coagulation; Water; Petroleum hydrocarbons; Reverse osmosis

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