

he invention relates to water treatment, industrial and household waste water, in particular, to the treatment using sorbents with immobilized microorganisms, and can be used at water purification from organic impurities, in particular, such as substances of humus nature, surface-active substances, dyes etc. The task of the invention is to increase the degree of water purity and term of validity of activated charcoal. A method for adsorption filter operation is proposed, comprising water filtering through activated coal with immobilized microorganisms in the presence of hydrogen peroxide (oxygen donor). At that hydrogen peroxide is introduced into adsorption column in the direction of water filtering in one or several places according to column height. Height of each introducing is determined based on proposed expressions. The implementation of the method provides for practically complete removal of organic substances (purity degree is 99.0-99.7 %) at duration of the process of 3000-4000 hours.