**Abstract**

In this paper, the authors, based on extensive research literature, highlight some aspects of advanced biological treatment processes by providing advanced technological efficiency in order to address surface water pollution. Natural sources of pollution of surface water, are mostly of their permanent sources. The quality of surface water to discharge effluent from wastewater treatment is influenced by poorly treated sewage, because they contain pollutants. Are the most dangerous pollutants are organic because they under certain conditions and concentrations of the fermentation. The composition of wastewater, the organic fraction is made up of carbon and nitrogen fraction. Effluents after the biological stage is classical in its composition different forms of nitrogen (ammonium salts, nitrites, nitrates, organic nitrogen) and phosphorus (phosphorus organic orthophosphates, polyphosphates) that reached the receiver are easily assimilated by the algae, contributing directly increase the rate of eutrophication of standing or slow flow. Research conducted in recent years by specialists in our country show a significant increase in these nutrients in surface water and groundwater. Tertiary or advanced stage of wastewater treatment is aimed at the elimination of wastewater nitrogen compounds, phosphorus and other chemicals remaining in water after using the biological processes of nitrification - denitrification. The purpose of this paper is to highlight the presence of pollutants in wastewater discharge into the emissary of insufficiently treated by conventional methods, the harmful effects of these pollutants on the environment and presentation of advanced treatment methods to resolve the problem.

**Key words:** surface, wastewater, emissary, purge, pollutant