

Analysis and Treatment of Sewage Treatment Plant Wastewater of El-Karma, Oran

Authors : Larbi Hammadi, Abdellatif El Bari Tidjani

Abstract : In order to reduce the flow of pollutants in the wastewater of the urban agglomerations of the city of Oran, a preliminary study was carried out at the El-Karma wastewater treatment plant. The primary objective of this study was to estimate the overall physicochemical pollution in the effluents of the El-Karma sewage treatment plant wastewater. It was found that the effluent of El-Karma wastewater treatment plant contains a significant amount of insoluble. Total suspended solids (TSS) concentrations ranged from 112 to 475 mg/l, with an average of 220.5 mg/l. The chemical oxygen demand (COD) and biochemical oxygen demand (BOD₅) values remain within the reference range for domestic wastewater with an average value of COD < 125 and BOD₅ < 25. The COD/BOD₅ ratio of raw water entering the treatment plant is less than 2. This ratio would predict that the raw sewage from the El-Karma treatment plant is polluted by inorganic pollution strong enough.

Keywords : El-Karma wastewater, TSS concentrations, COD and BOD₅, COD/BOD₅ ratio, treatment

Conference Title : ICHWRE 2018 : International Conference on Hydraulic and Water Resources Engineering

Conference Location : Barcelona, Spain

Conference Dates : December 17-18, 2018