

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

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**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 (BOD<sub>5</sub>) values remain within the reference range for domestic wastewater with an average value of COD < 125 and BOD<sub>5</sub> < 25. The COD/BOD<sub>5</sub> 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 BOD<sub>5</sub>, COD/BOD<sub>5</sub> ratio, treatment

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