



Analysis of Kasur Tannery Pre Treated Wastewater for Rendering it Fit for Irrigation

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ABSTRACT

This article presents the results of physicochemical analysis of pretreated tannery wastewater discharging from Common Effluent Pre Treatment Plant (CEPT) of Kasur is analyzed to find out its suitability for irrigation purposes and subsequent techno-economic evaluation to fit this wastewater for agriculture. The concentrations of various parameters such as pH, EC, TDS, SAR, RSC, SO_4^{2-} and Cl were determined using standard methods, computed and compared with the standards of wastewater for irrigation purposes proposed by WWF. The results reveal that the concentrations of EC 18.6 dS.m^{-1} , TDS 13020 mg L^{-1} , SAR 91.7, RSC 35.86, SO_4^{2-} (8061.3 mg L^{-1}) and Cl (8930.7 mg L^{-1}) are much above the permissible limits and thus it is suggest that the pretreated wastewater investigated here cannot be used for irrigation purposes without proper treatment such as reverse osmosis (RO), that being very expensive, is not feasible for a developing country like Pakistan.

Keywords: Pretreated, Wastewater, CEPTP, Kasur, Reverse, Osmosis, irrigation.
