



**Study of Physico- Chemical Parameters of Waste Water Effluents
from Waluj Industrial Area, Aurangabad**

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ABSTRACT

The present study was undertaken for physico-chemical analysis of industrial waste water collected from common effluent treatment plant Waluj Aurangabad in order to evaluate its effect on the surrounding environment. The industrial profile of the area includes Pharmaceutical industries, Food industries, Chemical industries, Automobile industries. Samples were collected at inlet and monitor for 4 months. The parameters studied includes- pH, Temperature, Color, Alkalinity, Conductivity, Chlorides, Hardness, COD, BOD, TDS,TSS etc. The analysis showed that there was vast difference amongst samples with respect to time and locality. It was observed that pH of the effluent slightly acidic (5.5 to 6.9) and TDS was 7048mg L⁻¹. Total solids content was 1528 mg L⁻¹ and chlorides were observed up to 4185 mg L⁻¹ which is higher than permissible limit. Hardness was observed up to 267 mg L⁻¹ and BOD, COD was 46 to 369 mg L⁻¹ and 352 mg L⁻¹ to 927mg L⁻¹ respectively. Most of these values are above the permissible limits ISI 2012 and this has resulted in polluting the environment of the surrounding area of the industry. So there is urgent need to develop technology to reduce the pollution and make the area safe for the components ecosystem including the people living nearby.

Keywords: Physicochemical parameter, Industrial effluent, COD, TSS, TDS, Chlorides, Hardness, Conductivity.
