



Analysis and Treatment of Industrial Effluents of Balasore Town: A Way for Water Analysis and Management

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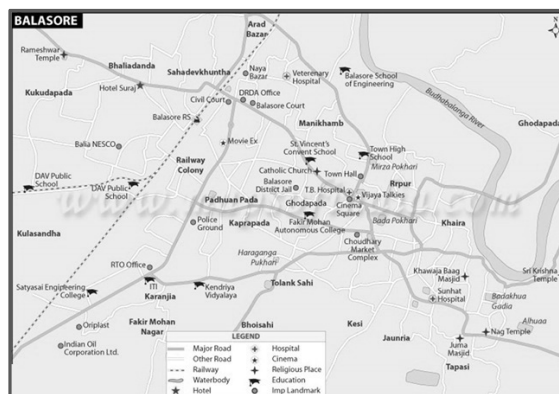
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ABSTRACT

The effluent ejected from various industrial operations is acidic in nature and contains heavy metallic contaminates if it is not properly treated which causes greater impact on the quality of surface water near by the city area and people of Balasore town are adversely affected by it. The proper treatment of the waste water effluents increases the pH and decreases pollution load of effluents to an acceptable level and causes the decrease in pollution load of both surface and ground water. The samples were collected from different areas of Balasore town and the different parameters like pH, COD, Electrical conductivity (EC), Turbidity, chlorides, Sulphates, Phosphates Hardness etc. These were analyzed by using suitable methods at different intervals of time. It was observed that the pH varies from place to place and in most of the places the industrial effluents are found to be highly acidic in nature. The levels of other pollutants in most of the areas are found to be high but the pH was found to be low. High levels of pollutants in water interfere with aquatic organisms of surface water in the command area of Balasore town and disturb the ecosystem and life style of the people of this town. Adsorption is one of the methods for effective treatment of waste water effluents.

Graphical Abstract



Water analysis study area of Balasore Town

Keywords: Effluents, Adsorption, Treatment, Fly ash, Parameters.