



A physical and chemical study of ground water and Heavy metal analysis of estuarine area in Chennai

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Abstract : An attempt has been made to study the impact of untreated sewage and industrial effluent in the sea at Chennai coastal area. In fact the sanitary wastes water comprises about 99.9 percent of water along with microorganisms. Once the sea water was used for bathing, washing and also for agricultural purposes, but at present the sea has become the place for collection of sewage water from the houses in an around the sea at a distance of 10km. Hence the water is completely polluted beyond purification.

In the present study it is observed that a high degree of sea water pollution due to high values of TDS, conductivity, chloride, ammonia and Turbidity. The ground water is affected at an alarming rate with high degree of water pollutants. Water quality results are above the permissible limit. Hence the water is rejected for domestic use.

estuarine area, especially marina beach and near by coastal area those who are enjoying with beach water they causes skin diseases, like itching and scabies and many of the aquatic living things also highly affected by the sewage water mixed sea water.

Environmental pollutant means any solid, liquid or gaseous substance present in such concentration as may be, or tend to be, injurious to environment. Environmental pollution area severe in the study area Environmental pollution means the presence ' in the environment of any environmental pollutant. Hazardous substance means any substance or preparation which, by reason of its chemical or physico-chemical properties or handling, is liable to cause harm to human beings, other living creatures, Micro-organism and property of the environment.

The problem of pollution of estuarine area and streams has assumed considerable importance and urgency to urbanization. It is therefore, essential to ensure that the domestic sewage water are not allowed to discharge into the watercourses without adequate treatment since the discharges would render the water unsuitable as source of drinking water as well as for supporting human life . Pollution of sea and streams also causes increasing damage to the country's economy.

Keywords: ground water and Heavy metal analysis, estuarine area, Chennai.