

Studies on ground water pollution in industrial areas of Chennai

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ABSTRACT:

In the present study an attempt has been made to evaluate the physicochemical parameters of ground water samples collected from 10 selected locations of five different industrial areas of Chennai. Physico-chemical parameters such as DO, Salinity, Alkalinity, pH, Calcium, Magnesium, Hardness, Iron Nitrite, Phosphate, Silica and Chloride were estimated following the procedures of NEERI. Highest nitrate level of (0.15 mg/L) was observed at Guindy Industrial Estate, whereas the lowest level (0.02 mg/L) was noticed at Avadi Industrial area. Silica content was found to be highest (66.67 mg/L) at Ambatthur Industrial Estate and the lowest level (12.29 mg/L) was observed at Guindy Industrial Estate. Highest iron content (0.59 mg/L) was recorded at Ambatthur Industrial Estate and the lowest level (0.13 mg/L) was noticed at Pallavaram Industrial area. Chloride level was highest (861mg/L) at Ambatthur Industrial area and the lowest level (223mg/L) was noticed at Pallavaram Industrial area. The results are discussed in the light of available literature.

Keywords:

Physicochemical parameters, Ground water pollution, Permissible limit, Industrial area.