

ASSESSMENT OF GROUNDWATER QUALITY IN CHIDAMBARAM TOWN, CUDDALORE DISTRICT, TAMILNADU STATE

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ABSTRACT

Water is referred to as a universal solvent. It is a prime necessity of life and has led to the growth of population along banks of natural water sources. Water is required for satisfactory performance of physiological organism as a circulatory fluid. Water plays an important role in the global world. Seasonal variation of ground water quality is defined as the monotonic change in particular constituents with time. Two major causes of variation in water quality data are seasonality and discharge. The present study deals about the quality of drinking water in and around Chidambaram Town, Cuddalore district, Tamil Nadu State. The groundwater quality to be assessed for various seasons (Pre-monsoon & Post monsoon). Samples have been collected monthly from a different location in and around Chidambaram town. The various parameters are tested such as pH, chloride, hardness, total dissolved solids, iron, phosphate, fluoride, ammonia, alkalinity and dissolved oxygen. The seasonal variation in groundwater quality parameters has been analyzed. The results of the analysis have been compared with the WHO and BIS standards and a suitable recommendation have been suggested.

KEYWORDS: *Groundwater, Water Quality, Hydrogeo Chemical, WHO & BIS Standards*