

CHARACTERIZATION OF GROUNDWATER USING WATER QUALITY INDEX OF SOLAPUR INDUSTRIAL BELT, MAHARASHTRA, INDIA

PAWAR R. S, PANASKAR D. B & V. M. WAGH

School of Earth Sciences, Swami Ramanand Teerth Marathwada University, Nanded, Mumbai, Maharashtra, India

ABSTRACT

Groundwater is an important source of drinking water supply throughout the world. WQI, a technique of rating water quality, is an effective tool to assess spatial and temporal changes in groundwater quality. Fifty groundwater samples were collected from dug wells and bore wells during the pre monsoon season. Water quality index rating was carried out to quantify overall groundwater quality status of the area. The values of WQI have been affected mainly by the concentration of dissolved ions in ground water. The values of WQI of the samples were found in the range of 61-1933. The majority of groundwater samples fall in Poor (40%) and Unsuitable (34%) category indicating groundwater not fit for drinking purposes. Because of the highly industrialized area, the impact of natural sources of contamination is as same as anthropogenic activities.

KEYWORDS: Industrial Belt, Groundwater, Solapur, Water Quality Index