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Groundwater contamination caused by industrial waste in the Waluj MIDC Area, district Aurangabad (M.S), India

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The growth of industries and the discharge of the industrial wastewater around the Waluj MIDC area is causing heavy damage to the groundwater quality available in the area. The study area is a part of Waluj MIDC area falling in representing Deccan basaltic terrain. The quality of groundwater in the study area 88 groundwater samples of dug wells and bore wells have been collected from pre and post monsoon period for the year 2011 and 2013. Geophysical, geohydrological & well inventory survey of study area is carried out & thematic maps like contour, DEM, drainage, lineament & geological maps of study area are prepared. From which at selected site chemical analysis of groundwater in the study area revealed higher value of pH, electrical conductivity, total dissolved solid, calcium, magnesium, total hardness, chloride and alkalinity content in the groundwater. The present study indicates that the groundwater is not suitable for drinking purpose as most of the parameters exceed the maximum permissible limit of Indian Standard for drinking water. Present research paper is in attempt to present a groundwater scenario for the Waluj MIDC area of Aurangabad district, Maharashtra.

Key Words: groundwater studies, physicochemical parameters, thematic Maps