VISVESVARAYA TECHNOLOGICAL UNIVERSITY

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PROJECT REPORT ON

BACTERIOLOGICAL ANALYSIS AND SANITATION AT

DODDABALLAPURA TOWN

Submitted in partial fulfillment of the requirements for the award of degree of Bachelor of Engineering in Civil Engineering

SUBMITTED BY

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SYNOPSIS

In recent years, an increasing threat to ground water quality due to human activities has become of great importance. The adverse effects on ground water quality are the results of man's activity at ground surface, unintentionally by agriculture, domestic and industrial effluents, unexpectedly by sub-surface or surface disposal of sewage and industrial wastes. These wastes when disposed in unscientific ways lead to unhygienic conditions. The various pollutants present in the waste interact with soil and ground water then travels and ultimately joins the water table. The same water when utilized for the drinking purpose, it has the potential to spread epidemic diseases for the people living in the surroundings and they cause major threat to the welfare of man and environment.

In present work bacteriological studies and sanitation in Doddaballapura town in Karnataka state is carried out . During the survey water supply and sanitation details are collected by using questionnaire. Sampling station were selected close to low cost sanitation Systems to study their impacts on groundwater quality. Groundwater samples from 22 different borewell locations were collected. Analytical techniques as described in the standard methods for the examination of water and wastewater were adopted for physical-chemical analysis and bacteriological analysis of these samples .The results are compared with the Bureau of Indian Standards (BIS) guideline values for potable water in the light of possible health hazards.

The samples were analyzed for various parameters like: pH, Conductivity, Dissolved Solids, Total Solids, Chloride, Sulphate, Nitrates, Sodium, Total Iron, Calcium, Magnesium, Total Hardness, Fluoride, Bicarbonate, Carbonate, and Potassium and for bacteriological test The analysis of water samples reveals that in the study area, most of the water quality parameters like Total Hardness, Chloride content, exceeds the permissible limits. On the basis of both chemical and bacteriological analysis, the water samples are found to be fit for drinking purpose.