

GROUND WATER QUALITY ASSESSMENT NEAR MUNICIPAL SOLID WASTE DUMPING SITE, SOLAPUR, MAHARASHTRA, INDIA

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ABSTRACT

Municipal Solid Waste (MSW) involves the flow of solid waste generated by households, commercial developments, industries and institutions. Inadequate or improper management and disposal have serious consequences for the environment and human health. Improper management of MSW leads to many serious problems including ground water contamination. All major sites in developing countries are facing the problems of municipal solid waste management. Municipal waste disposal sites pose serious environmental threats to their surroundings and nearby resident due to contamination, pollution problems and health risks.

In present investigation, water samples were collected in the study area during pre- monsoon and post- monsoon season from January to April 2012 and September to December 2012 and were analyzed for parameters includes pH, Turbidity, Hardness, Total Dissolved Solids, fluoride, Chloride, Sulphate, Nitrate, MPN etc. The results of collected water samples for both seasons show that the ground water is not potable within WHO guidelines, particularly in post monsoon season due to high bacterial contamination that may result in many waterborne diseases and other environmental problems.

KEYWORDS: Groundwater, Microbial Contamination, Leachate, Seasonal Variation, Water Pollution, Water Quality