



SEASONAL VARIATIONS IN THE GROUND WATER CHARACTERISTICS AT MSW SITES AT KONDAPALLI AREA, ANDHRA PRADESH, INDIA

V. Bhagya Lakshmi ¹, Dr.M.Raghu Ram ²

¹Dept. of Science and Humanities, Lakireddy Bali Reddy College of Engineering, Mylavaram, Krishna Dist (A.P), India.

²Dept. of Botany & Microbiology, Acharya Nagarjuna University, Guntur (A.P), India.

ABSTRACT

The present study has been conducted to assess the physical & chemical parameters of the ground water pollution at a residential area adjacent to municipal solid waste (MSW) dump site in Kondapalli city. The city being in the vicinity of the new capital of Andhra Pradesh i.e. Amaravati, in the near future the projected population growth will be in millions which might increase the same proportion the solid waste. MSW management gets the lowest priority, mainly because disruptions and deficiencies in it do not directly and immediately affect public life and cause public reaction. In the present study, the impact of leachate infiltration and percolation on groundwater quality was estimated from an unlined dump site of Kondapalli in the outskirts of the city in order to find out the seasonal and temporal variations in the water quality which would serve as a baseline work for future studies. The results revealed high concentrations of total dissolved solids; electrical conductivity, total alkalinity, total hardness, chlorides and sodium in the studied samples which are in higher range than acceptable limits. MSW dumping in the open area should be prohibited by the authorities to control the further pollution of water.

Key words: Municipal solid waste (MSW), dumpsite, ground water, leachate etc.