

Effect of Waste Dumping on Groundwater Quality at Guntun Layi Funtua, Katsina State

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Abstract : Rural water supply relies mainly on groundwater exploitation, because it is more accessible, reliable, cheaper to develop and maintain, also with good quality compared to the surface water. Despite these advantages, groundwater has come under pollution threats like waste dumps, mineral exploitation, industrialization etc. This study investigates the effects of an open dumping to the surrounding groundwater. Ten hand dug well water samples were collected from the surroundings and tested. The average result shows that temperature, colour and turbidity to be 8.50 c, 6.1 TCU and 3.1 NTU respectively and pH, conductivity, total dissolved solids, chloride content and hardness to be 7.2, 4.78, 1.8, 5.7, and 3.4 respectively while in the bacteriological test well no. 1, 2, 3, and 5 shows the presence of coliforms and E. Coli bacteria.

Keywords : groundwater, pollution, waste, dump site, unsafe, quality

Conference Title : ICWMEE 2015 : International Conference on Waste Management and Environmental Engineering

Conference Location : Jeddah, Saudi Arabia

Conference Dates : January 26-27, 2015