

Abstract

Water quality is an index of health and is one of the areas of major concern to environmentalists, since industrialization, urbanization and modern agricultural practices have a direct impact on the water resources. Borehole water is the major source of water supply in Kihara division, Kiambu County. In this paper an attempt has been made to evaluate water quality parameters of selected boreholes. Chemical parameters which were analyzed are Total Alkalinity, Chlorides, Nitrates and heavy metals. Physical parameters like pH, Total Dissolved Solids (TDS), and Turbidity were also analyzed and the results were compared with standard permissible limits set by WHO. The results revealed that some of the parameters were above WHO standard for drinking water, so there is need for strict monitoring to ensure quality water supply for human health. The analysis data of heavy metal elements concentration Fe, Pb, Cu, Cd, Ni and Zn were within the permissible limits except for Pb in B4 and B8