

The impact of underground water pollution on human health

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ABSTRACT: Underground water is easily available and its temperature and quality are quite stable, it is an important element of earth's water circulation system. Hence the underground water environment must be conserved and prevented to protect human health. In the presented work the underground water samples were collected in the month of April 2010, at different located sites from dug wells (A), hand pumps(B), IM-II hand pumps (C), and tube bells(D) in Sultanpur city to analyze the different important physico-chemical parameters viz. color, pH, electrical conductivity (EC), alkalinity, dissolved oxygen (DO), biochemical oxygen demand (BOD), Ca, Mg, F⁻, Cl⁻, SO₄⁻, and total hardness (TH), by using standard methods. The most of parameters were studied with the help of water analysis kit whether some of them like Ca and Mg hardness were estimated by complexometric titration method, Cl⁻, F⁻ and SO₄⁻ content were determined volumetrically. On the basis of data analysis obtained, it was found that the most of the water samples were fit for drinking and agricultural purposes according to WHO and BIS standards.

Key Words: Underground water pollution, physico-chemical parameters, Sultanpur city.