A CASE STUDY OF HEAVY METALS OF BAGAD RIVER FROM GAJRAULA

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Abstract: The aim of this study is to determine heavy metals in contaminant drinking water of Bagad river (A tributary of Ganga). It is a micro level study of Gajraula town of Amroha district of U. P. which will be useful in studying and understanding impact of water pollution on human, residing in any region of the country in terms of health status. The chemistry of drinking water commonly has been cited as an important factor in many diseases. Metal extraction is an important industry for our modern way of life. However, all phases in the life of a mine can discharge metals to rivers, estuaries, streams and lakes. Metal dissolve in water and are easily absorbed by fish and other aquatic organisms. Small concentration can be toxic because metals undergo bio-concentration, which means that their concentration is an organism is higher than in water, metal toxicity produces adverse biological effects on an organism's survival. Metal can be lethal or harm the organism without killing it directly. Adverse effects on an organism is activity, growth, metabolism and reproduction are examples of sub lethal effects. These diseases are apparently related to contaminant drinking water with heavy metals such as Zn, Hg, Cd, Cu, Ni, and Cr. Renal failure is related to contamination drinking water with lead and cadmium, liver cirrhosis to copper and molybdenum, hair loss to nickel and chromium, and chronic anemia to copper and cadmium.

Keywords: Heavy metals, Water, River, Ganga

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