

Journal of Applicable Chemistry

2024, 13 (1): 27-34 (International Peer Reviewed Journal)



ISSN: 2278-1862

Drinking Water Quality Status of Some Selected Industrial Areas of Agra City (U.P.), India

Durgesh Raj Mohan*

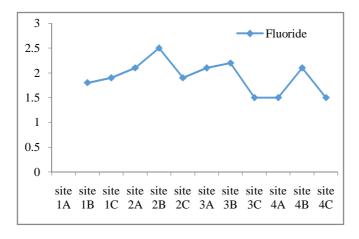
Department of Chemistry, Maharaj Singh College, Saharanpur (U.P.), INDIA. Email: rajmscollege@gmail.com

Accepted on 6th January, 2024

ABSTRACT

Water is a vital resource for human survival. Safe drinking water is a basic need for good health, and it is also a basic right of humans. Due to its outstanding significance to the consumer its parameters must follow the permissible limits set by international water regulating agencies. The present study was therefore undertaken to assess the quality of drinking water of some selected industrial areas of Agra city. 12 water samples were collected from 4 sampling sites and analyzed for physico-chemical parameters such as pH, conductivity, total dissolved solids, total hardness, total alkalinity, chloride and fluoride as well as heavy metals such as Cu, Zn, Fe and As. TDS of most of the water samples exceeded the maximum permissible limit set by WHO and ICMR. Significantly, iron was found much above the maximum permissible limit of WHO in almost all the samples, whereas arsenic contamination was also noted at many sites. The results reveals that the water quality of most of the sites of industrial areas of Agra city is not suitable for drinking purpose which recommends the use of indigenous technologies, to make water fit for drinking purpose.

Graphical Abstract:



Fluoride in drinking water of selected industrial areas of Agra City

Keywords: Agra, Drinking water, fluoride, Ground water, hardness, TDS.