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Contamination of Groundwater by Arsenic in Ballia & Ghazipur Districts of Eastern U. P.

Akbare Azam *
Bhupendra Kr. Sarma **

Arsenic, a notable and a well-known cancer-causing agent, is perceived as one of the world's most hazardous synthetic compounds. Soil & groundwater are contaminated by arsenic due to weathering or disintegration of rocks containing arsenic sediments and its dissolution into water floods which carry it to affected areas. Location of U. P. is in middle Ganga plain and it has tropical monsoon climate. It has 75 districts which are further divided into divisions and tehsils. Eastern part of U. P. is severely affected by As contamination. Many investigation agencies like U. P. Jalnigam, UNICEF AND WHO have reported more than 63 ppb As in drinking water of inhabitants which is very fatal for human life. Water sampling data reported high level of As contamination in many districts of eastern U. P. like Ballia, Ghazipur, Varanasi, Chandauli, Siddharthnagar, Gorakhpur, Basti, Lakhimpur Khiri etc. Study of contaminated water samples from villages Haldi, Bairiya, Belhari, Dubhad, Mohan Chapra, Sikandarpur, Dipran kalan, Premchapra & Suremanpur (Ballia district) and villages of Ghazipur district Reotipur, Deokali, Mohammadabad, Karanda, Ghazipur city etc. show variation of As concentration during Pre and Post monsoon seasons.

Keywords : Hazardous, Groundwater, As contamination, Pre and Post monsoon seasons, As concentration.

Introduction : Groundwater is the principal and fundamental wellspring of savoring water townships and furthermore in the greater part of the towns. In this way, pollution of groundwater is taken as a factor of genuine misery. It is the first noteworthy wellspring of water for horticultural, household, business and mechanical purposes in more nations. The age and reason for water

* Department of Chemistry, Government Girls P. G. College, Ghazipur, U. P., India

** Department of Chemistry Mewar University, Gangrar, Chittorgarh Rajasthan