

## **ELEVATED LEVELS OF NITRATE IN GROUNDWATERS OF BELLANDUR AREA OF BANGALORE AND ASSOCIATED HEALTH RISKS**

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### **ABSTRACT**

Nitrates are also responsible for a number of health disorders, both in human beings and animals. In the present study, nitrate contents have been quantitatively estimated in the groundwaters of Bellandur area during the pre-monsoon and post-monsoon periods of 2007 by collecting 30 samples in each season. The hydrochemical data indicates a large variation of nitrate from 4 mg/l to 394 mg/l in the pre-monsoon and 6 mg/l to 418 mg/l in the post-monsoon seasons. 54% of the samples have shown high nitrate contents (>45 mg/l), which is more than the permissible limits of drinking water as per the Bureau of Indian Standards, BIS 10,500. The study shows that the nitrate levels of the groundwater are more during the post-monsoon season. An attempt has been made to identify the possible sources of the high nitrate level in groundwater and some mitigative measures for the same have been suggested.