Arsenic Removal Technologies for Contaminated Groundwaters

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Abstract

Contamination of natural waters with arsenic, which is both toxic and carcinogenic, is widespread. The World Health Organizations (WHO's) current provisional guideline for arsenic in drinking water is ۱۰ µg/L, but all developing countries affected with contaminated groundwater are still struggling to keep up with the previous WHO guideline value of ۵۰ µg/L. Nanotechnology is considered to play a crucial role in providing clean and affordable water to meet human demands.

This review presents an overview of the technologies currently being investigated to remove arsenic from drinking water. The paper highlights the application of conventional techniques, nanomaterials and Metal Organic Frameworks.

Keywords: Nanomaterials, Metal Organic Frameworks, Arsenic Removal