

Polluted Drinking Water Remediation

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Background: Water quality guidelines can be used to identify constituents of concern in water, to determine the levels to which the constituents of water must be treated for drinking purposes.

Aim: How to treat polluted drinking water.

Methods: Fifty water samples representing different types of drinking water were collected and subjected for analysis chemically and microbiologically. Heavy metals were measured by atomic absorption spectrophotometer.

Results: There were several areas polluted chemically by some heavy metals (Ni, Cd, Pb, Mn and Fe) and microbiologically by (*Entamoeba Histolytica*, Amoeba, Egg of Nematodes and total count of Bacteria).

Conclusions and Recommendations: Membrane technology for the water cycle is playing an important role in the provision of safe water supply and treatment. Removal of some chemical constituents must be done and sewage system projects are implemented in all polluted areas of towns and villages.

Keywords: Water quality, Guidelines, Membranes.