

Drinking water quality assessment in Constanta town

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Abstract The quality of drinking water is an issue of primary interest for the residents of the European Union. Water is essential to sustain life, and a satisfactory supply must be made available to consumers. Failure to provide effective treatment of water sources and safe distribution of treated drinking water can expose the community to the risk of outbreaks of diseases or other adverse health effects.

The paper aims to emphasize the actual sources of water supply in Constanta town, the applied treatments according to their quality and the water treatment processes performances obtained in 2009.

All the studied quality parameters (turbidity, pH, ammonium, nitrites, nitrates, free residual chlorine, chlorides, permanganate indices, total hardness, total dry residues, sulfates, conductivity) have been maintained in the accepted limits. Important removal efficiencies have been observed for turbidity (65-93%), nitrites (72-96%) and organic substances (46-78%).

Keywords: drinking water, turbidity, nitrites, organic substances, removal efficiencies
