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ANALYSIS OF THE EFFICIENCY OF THE WATER TREATMENT PROCESS WITH CHLORINE

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Abstract

The quality of drinking water can be kept under control through the protection of raw water sources and the permanent monitoring and control of the processes of treatment and distribution of drinking water. The dangers and risks faced by drinking water supply systems may arise from inside or outside the system. Water disinfection is the key element behind obtaining and maintaining quality water. Chlorine is the most widely used disinfectant, due to its high efficiency. However, it has a major disadvantage, namely that it has a fairly fast decomposition power in the distribution network. The study highlights the need for the presence of free residual chlorine in drinking water, both at the exit of the treatment station (Palas Constanța water treatment complex) and at the end of the network (Eforie Nord network) by monitoring the two points, in the period January 2013 - December 2018. The presence of free residual chlorine in the drinking water at the parameters imposed by the legislation in force ensures a protection of the microbiological quality of the water. Monitoring the quality indicators of drinking water is an essential step to prevent the risk of disease of the population. The purpose of the study is to determine the potential relationship between the presence of free residual chlorine and microorganisms in the distribution network and risk factors.

Key words: chlorination, disinfection, monitoring, risk, quality

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