

THE OCCURRENCE OF HALOACETIC ACIDS IN KRAKOW WATER DISTRIBUTION SYSTEM

AGNIESZKA WŁODYKA-BERGIER, TOMASZ BERGIER

Abstract: The article presents the results of the research on the water samples taken from the Krakow water distribution system and their pollution by haloacetic acids: monochloroacetic acid, monobromoacetic acid, dichloroacetic acid, trichloroacetic acid, bromochloroacetic acid and dibromoacetic acid.

The water samples were taken from the extremities of the distribution systems (Raba and Bielany) in the city of Krakow. Both analyzed plants use the chlorination as the water treatment process, however, water for Raba and Bielany comes from different surface waters and differs in quality and organic matter concentration. These plants also apply different water treatment processes and their distribution systems have a different size. The objective of this study was to measure the haloacetic acids levels in these two water distribution systems, assess the correlation between the total trihalomethanes and the sum of six haloacetic acids, determine if trihalomethanes can be a good indicator to predict haloacetic acids concentration in water distribution systems