

Swiderska-Broz, M. Threats Associated with the Presence of Biofilm in Drinking Water Distribution Systems. *Ochrona Srodowiska* 2012, Vol. 34, No. 1, pp. 9–14.

Abstract: The paper addresses some major issues linked with biofilm development in drinking water distribution systems. Consideration is given to the increased demand of water for disinfectants, as they have become an indispensable part of biofilm growth control in water-pipe networks. Upward trends are observed in biofilm-induced corrosive damage of plumbings and pipes, and also in tap water recontamination. Both the phenomena give rise to serious operating problems concomitant with the degradation of the biofilm formed and, consequently, with safe water supply to the user. Biofilm formation and development on the internal surfaces of the water distribution system is becoming a matter of growing concern not only because of the continuing rise in the cost of tap water distribution. Far more alarming are the threats to public health emerging from the presence of microorganisms colonizing the biofilm and from the products of microbial activity in the water supplied to the users.

Keywords: Pipe material, biofilm, plumbings, electrochemical corrosion, microbiological corrosion, corrosion product, disinfectant, regrowth.