

Swiderska-Broz, M., Wolska, M. Variations in the Biostability of Infiltration Water in the Treatment Train. *Ochrona Srodowiska* 2012, Vol. 34, No. 4, pp. 63–68.

Abstract: Variations in water biostability were tested under actual full-scale conditions, where infiltration water was treated using a treatment train composed of aeration, rapid sand filtration, ozonation, adsorption onto biologically active filters, and alkalization–disinfection. The technological processes involved differed in the removal efficiency of organic and inorganic biogenic substances, which was influenced by a diversity of factors. Biodegradable organic substances were most effectively removed during filtration through biologically active granular carbon, and phosphate ions during sedimentation after aeration, as well as during filtration through sand beds. However, the investigated technological train for infiltration water failed to provide the biostability desired, which is attributable to the insufficient removal of biogenic substances in general, and inorganic nitrogen in particular.

Keywords: Water treatment, biogenic substances, dissolved organic carbon, biodegradable, nonbiodegradable, assimilable organic carbon.