Swiderska-Broz, M., Wolska, M. Efficiency of Surface Water Treatment Processes at Removing Biodegradable Organic Substances. *Ochrona Srodowiska* 2011, Vol. 33, No. 4, pp. 77–80.

Abstract: The focus of this work is on changes in the biodegradable organic matter content of surface water during particular unit processes and in the entire treatment train. It has been found that volume coagulation and sorption on biologically active carbon beds provided the highest removal of biodegradable dissolved organic carbon (BDOC) and its assimilable fraction (AOC). Rapid sand filtration and disinfection with chlorine had no influence on the organic matter content of the water. The ozonation process brought about an increase in the concentrations of both BDOC and AOC, which were efficiently removed by sorption on the biologically active carbon bed following the ozonation process. Analysis of the experimental results shows that the organic matter removal obtained with the treatment train applied is insufficiently high to provide biostable tap water.

Keywords: Water treatment, biodegradable dissolved organic carbon, assimilable organic carbon, water biostability.