Abstract

The paper presents the results of the analysis concerning the verification of the actual hydraulic load and the load of organic pollutants compared to the conditions designed for 4 household wastewater treatment plants. The researches were carried out in the annual period from May 2015 to April 2016. Based on the conducted analysis, it was found that objects act as underloaded hydraulically and the actual inflow of sewage to the analysed objects during the research period ranged from 7.3% to 32.7% in relation to the inflow assumed in the project. Furthermore, in the case of loading the treatment plant with the load of pollutants expressed as $PE$, it was fund that the actual $PE$ values were lower than assumed in the project. Therefore, it is important that the sizes of the series of household sewage treatment plants were selected depending on the individual conditions of household, i.e. the number of inhabitants or the amount of consumed water.

Key words: household wastewater treatment plants, hydraulic load, inflow per inhabitant (person), population equivalent