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THE EVALUATION OF BACTERIOLOGICAL HAZARD IN SURFACE WATERS NEAR THE OPERATING MUNICIPAL LANDFILL SITE

Key words: drainage waters, microorganisms, municipal landfill site

Summary

Municipal landfill sites are among the most important potential sources of health hazards to humans. So far, chemical properties of waters have been mainly controlled in the vicinity of landfill sites, omitting the microbiological aspect. Thus, the aim of this study was to evaluate microbiological quality of surface waters flowing on the terrain and in the surrounding of municipal landfill site. Water samples were taken seasonally: in spring, summer, autumn and winter, twice in each season, from 7 sampling sites located at and around municipal landfill site Barycz in Kraków.

All groups of microorganisms which are regarded sanitary-hygienic indicators of water quality were identified in analysed surface waters. Obtained results suggest that the number of tested groups of microorganisms significantly depended on the distance of sampling sites from the borders of landfill site and on the term of sampling.