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MICROBIOLOGICAL THREATS FOR GROUNDWATER IN THE IMPACT ZONE OF MUNICIPAL DUMPING SITE

Key words: bacteria, ground water, microbial pollution, municipal dumping site

Summary

Municipal dumping site is a unique environment due to the permanent supply of organic and inorganic matter in wastes. It results in continuous bacteriological hazard to surrounding surface water, ground water and leachate. The aim of the study was to assess the impact of municipal dumping site and wastes from this dump on the microbiological quality of ground water from municipal dump and its vicinity. Bacteriological analyses included the evaluation of the number of mesophilic, psychrophilic and indicator bacteria – coliforms, fecal streptococci and Clostridium perfringens.

Results of microbiological tests revealed high bacteriological contamination of water samples collected from all piezometers. This was probably a result of groundwater contamination by leachate from the landfill.