TITLE: MICROBIOLOGICAL ANALYSIS OF IPANEMINHA COMMUNITY WATERCOURSE, IPATINGA-MG

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ABSTRACT

Watercourses may reflect deficiencies in basic sanitation, as well as impacts resulting from the dynamics of soil occupation and the economic activities developed there, functioning as biomarkers. The quality of the waters of a river is influenced by several factors, of which the anthropic action stands out in its various forms, invariably contributing to the introduction of debris into the water and thus affecting its total quality. As a consequence of the deterioration and reduction of water resources, every 15 seconds, a child dies of diseases transmitted by water.The objective of this work was to evaluate the water quality in the watercourse that goes through the community of Ipaneminha, Ipatinga – MG, through microbiological parameters recommended according to current legislation, for potability of water (Portaria 2914/2011 of the Ministry of Health and Resolution 357/2005 CONAMA). According to this resolution, water is considered to be potable from the strictly microbiological point of view when there is no detectable total and thermotolerant coliforms in 100 ml of sample. The watercourse under study is part of the APA-IPANEMA (Environmental Protection Area Ipanema), with an area of 74 km² around the sources of the Ipanema stream. In situ collection of reservoirs for distribution, consumption sites, and riverine areas of water after residential use. The appropriate analyzes were carried out by a certified laboratory and it was determined the prevalence of water contamination, verifying the factors that offer greater risks to Public Health. It was found contamination by total coliforms and *Escherichia coli*, not meeting the standards of potability recommended for the human consumption representing a risk to health. In conclusion, the results make evident the need for improvement of sanitation infrastructure and agro-environmental planning in the cities of the watershed.

Keywords: Watercourses, Potability, Ipaneminha, Ipatinga – MG, Microbiological parameters, Contamination.

Development Agencies: FAPEMIG