

## PREFACE

Good quality water supply is a prerequisite for healthy and sound life. However many microorganisms use water as their habitat, some of which are disease causing or pathogenic which can even be life threatening. Water borne bacterial pathogens most often detected in contaminated drinking water supplies include *Shigella*, *Salmonella*, *Campylobacter*, *Vibrio*, toxigenic *E. coli*, *Yersinia enterocolitica*, *Streptococci faecalis* which are also detected in faeces of infected individuals. Therefore drinking water must be free of such pathogenic contaminants in order to prevent waterborne disease outbreaks. In spite of the limitations of methodologies and interpretation, some organisms can be routinely monitored and can be used as indicators for faecal contamination and the potential presence of enteric pathogens. Commonly used indicators include total coliforms, faecal coliforms (*E. coli*) and faecal streptococci (*Streptococcus faecalis*). The use of faecal indicators helps in the estimation of the microbiological quality of drinking water by reducing the complexity and cost of a direct analysis of pathogens. In the present study microbiological quality of water of three important lakes of tourist importance in Darjeeling hills was investigated. The lakes are also important sources of drinking water in Mirik and Sukhia Pokhri town areas. All the lakes were observed to exceed the acceptable limits of national and international water quality standards set for microbiological parameters.

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