BACTERIOLOGICAL LEVELS IN WATER DISTRIBUTED BY KEWASCO

Mutai Norah Chepkemoi
Lecturer, School Of Biological and Physical Sciences
Moi University, **KENYA**

ABSTRACT

Availability of safe and portable water may not be easy due to inadequate control, operation and maintenance of the water distribution system in developing countries. This study was conducted to ascertain whether water supplied by Kericho Water and Sanitation Company (KEWASCO) is safe for human consumption or not. Bacteriological parameter analysed was: *E. coli*. Samples were collected three times during the months of January, February and March from four stations namely, rivers feeding into the treatment plants, treatment plants (treated water), consumer terminals and dumpsite leachate. LST-MUG method was employed for detecting *E.coli*. *E.coli* tested negative in the first and second test in all stations while it tested positive in the third test in only two stations. The water which tested positive with *E.coli* from the consumer points was an indication that the water systems should be inspected to determine the cause. Sampling and inspection should continue until consecutive samples comply with the standards in the guidelines. The measure of *E.coli* was, however, within the water quality standards for municipal piped water and therefore fit for drinking. It is suggested that further research that focus on more resistant microorganisms, such as bacterio-phages and/or bacterial spores be done.

Keywords: *Water portability, bacteriological load, E-coli.*