Performance Evaluation of Drinking Water Treatment Plants in Kampala - Case of Ggaba II

H M Kalibbala, M Nalubega, O Wahlberg and B Hultman

Abstract

Kampala water treatment plant (Ggaba II) was evaluated in terms of performance, design, operation and maintenance. The evaluation was done across the dry and wet seasons, measuring physical-chemical parameters. Receding water level of Lake Victoria combined with poor quality of water at the intakes affected the supply of water in Kampala and the neighbouring districts. There was considerable increase in the colour of about two fold at the intake works during the period 1997 to 2005 with increased chemical usage to achieve acceptable standards. The conditions of operation and maintenance were also found to be deficient with some design and construction problems as well. The annual mean colour of the finished water was found to be significantly above the National standard value of 15 PtCo with 53.4% of samples not compliant. 21.6% and 9.3% of the samples taken were not compliant with the WHO pH and turbidity values respectively.