

Free Residual Chlorine and Bacteriological Contamination in Addis Ababa Water Supply System, Ethiopia

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Abstract : A cross-sectional study was conducted in order to understand the effect of wet and dry seasons on the free residual chlorine and bacteriological contamination of the Addis Ababa (Ethiopia) water supply system. Water samples were taken at 30 selected distribution points and analyzed for Free Residual Chlorine and bacteriological analysis total coliforms and fecal coliform). It was found that some of the bacteriological data and Free Residual Chlorine levels are below the recommended values and beyond the maximum tolerable limits recommended by World Health Organization and Ethiopian National Standards. Water quality during the dry season is better than that of the wet season. There is a strong relationship between Free Residual Chlorine levels in drinking water and its bacteriological quality.

Keywords : addis ababa, wet season, dry season, free residual chlorine

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