



Control of assimilable organic carbon (AOC) concentrations in a water distribution system

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ABSTRACT

The aim of this study is to measure the bioavailable organic matter content in water. This study examines the changes in assimilable organic carbon (AOC) concentrations in a traditional water treatment plant in southern Taiwan and its associate water distribution system. The addition of chlorine to raw water is shown to produce an increase in AOC, resulting in waterborne AOC concentrations in excess of 50 µg acetate-C/L in some circumstances. Examination of water distribution networks indicate that AOC values decrease as the distance from the treatment facility increases. The residual chlorine concentrations in the distribution system must be in the range from 0.52 to 0.73 mg/L.

Keywords: Assimilable organic carbon (AOC); Water treatment plant; Distribution system

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