

**DETERMINATION OF WASTEWATER QUALITY CHANGES
UNDER AEROBIC CONDITION**

By

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DECLARATION BY THE CANDIDATE

I Salwamurni bt. Abd. Rauf, 2001648840 confirm that the work is my own and that appropriate credit has been given where reference has been made to the work of others.

none

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ABSTRACT

The sewer is an integral part of the urban wastewater system. Apart from performing a transport function it has been proven that sewer network can also serve as a reactor, where microbial processes occur. Microbial processes in sewer networks may occur under aerobic, anoxic and anaerobic conditions depending on the type of electron acceptor present in the system. This project is intended to study the changes in electron donor and electron acceptor under aerobic condition during microbial transformations of municipal wastewater under sewer condition. Samples for this study were taken directly from sewers or inlet of the wastewater treatment plant (WWTP) at Jalan Ilmu UiTM, Shah Alam. Samples were subjected to aerobic condition in batch reactors. Changes in electron acceptor (dissolved oxygen) and changes in electron donor were monitored during the aerobic transformation processes. The change in electron donor was defined by the change in Chemical Oxygen Demand-fractions (COD-fractions) at the beginning and end of the experiments.

KEYWORDS

Aerobic condition, COD-fractions, in sewer processes and wastewater quality changes.

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