

**TO STUDY THE WATER QUALITY
AT INTAKE POINTS**

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ABSTRACT

Due to the rapid development in the country lately, the amount of domestic waste or uncontrolled landuse for urbanisation for examples being discharged into the source particularly river. This phenomenon creates problems especially at intake point which is deteriorating the quality of raw water to be treated.

Generally, each water use including abstraction of water and discharges of wastes impacts on the quality of raw water and the uncontrolled and excessive use of fertilisers for example, has long- term effects on surface water resources and ground water.

The deterioration of raw water quality at source or intake may be measured in terms of changes to the physical, chemical and biological characteristic. The effects may be on depletion of oxygen levels, present of chemical content from industrial waste such as lead or high turbidity and colour.

This project is to investigate the quality of raw water at intake point and treated water. It is done by taking samples and test the parameters required at the laboratory. Results from the laboratory test will be analysed and identified. Then, water quality at intake point and treated water will be determined.

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CHAPTER ONE

1.0 General

A variety of developments in the water quality field during the last decade and a half and an increasing understanding of health effects are creating an upheaval in the water treatment field. With the identification in water of low levels of potentially harmful organic compounds, a coliform-free and turbidity-free water is no longer sufficient. New information regarding inorganic contaminants, such as lead which can cause cancer, is forcing suppliers to tighten control of water quality within distribution system.

Survey conducted is mainly to obtain an idea of the quality of the raw water at various intake points and under varying weather, and if possible to assess the effect of contaminant present to the treatment process. It may also determine the type of treatment required because the water quality will affect the treatment processes. The selection of water treatment processes also depends on desired finished water quality and flexibility in dealing with changing water quality and equipment malfunctions.

1.1 Function of Water Treatment Plant

Water from many surface and groundwater sources is not suitable for potable supply purposes in its untreated state. Treatment may be required to produce water that is