WATER QUALITY MONITORING IN SELANGOR RIVER BASIN

By

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ABSTRACT

This thesis is a case study of Selangor River Basin, consisting of reviewing, studying and comparing the adequacy of existing monitoring network which the following hypothesis is tested in the work; ‘The existing Control Standard (Effluent Limit) is not adequate to control water pollution’. This thesis also performed the mass balance analysis to the present system and compare to the proposed system in order to study the impact of pollution from palm oil and rubber processing factories on Selangor River Basin.

From the analysis done, shows that the above mentioned factories are not the major pollutant contributor to the study area. The results conclude that there is not enough evidence to say that the existing control standard (effluent limit) is not adequate to control water pollution although some of certain aspect needs slight adjustment.

Keywords: Pollution Control, River Quality Monitoring
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>CONTENT</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>i</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td>ii</td>
</tr>
<tr>
<td>TABLE OF CONTENTS</td>
<td>iii-vi</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>vii</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>viii</td>
</tr>
<tr>
<td>LIST OF PHOTOGRAPHS</td>
<td>ix</td>
</tr>
<tr>
<td>LIST OF ABBREVIATIONS</td>
<td>x-xi</td>
</tr>
</tbody>
</table>

## CHAPTER ONE - INTRODUCTION

1.1 THE PROBLEM THAT WE FACE          | 1    |
1.2 HOW DOES IT HAPPEN                | 2    |
1.3 JUSTIFICATION                     |      |
   1.3.1 Need For The Study Of This Topic| 2-3  |

1.4 HYPOTHESIS                        | 3    |
1.5 OBJECTIVES                        | 3    |
1.6 SCOPE OF WORK                     | 4    |

## CHAPTER TWO - LITERATURE REVIEW

2.1 WATER POLLUTION                   | 5-6  |
   2.1.1 Water Pollution Control       | 7    |
WATER QUALITY MONITORING IN SELANGOR RIVER BASIN

1.0 INTRODUCTION

1.1 The Problem That We Face

Today, sewage and industrial effluents are found to be the major pollutant in Malaysian rivers.

The collection and gathering of information on the sources of pollution is a continuing exercise to update the database for water pollution sources. Detailed source investigations were carried out through questionnaires sent out to the industries and various related agencies. A total of 3,141 industries were identified as significant water pollution sources in Malaysia in 1995. Of this total number of sources, food and beverage industries led with 971 sources of 30.9% contribution followed by the chemical industries with 424 sources (13.5% contribution) and the textile industries with 327 sources (10.4% contribution). Chart 1 in the appendix A shows the distribution of significant water pollution sources by state. Meanwhile, sewage and animal wastes are identified as the largest contributors of organic pollution load. (DOE, 1995)

Initial efforts to tackle water pollution problems began through enforcement of legislation enacted during the 1979. This has had a positive effect in reducing pollution from industries in Malaysian waterways.