THE EFFECT OF NITROGEN AND PHOSPHORUS COMPOUNDS ON THE EFFICIENCY OF SEWAGE TREATMENT PLANTS

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DECLARATION

Except where reference is made to the work of others, this report is believed to be original.

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ABSTRACT

Nitrogen and phosphorous compounds are of particular importance due to its significant presence in domestic wastewater. It is believed that the concentration of these compounds effects the microbiological processes during the secondary treatment in a treatment plant.

This project is intended to establish typical ranges of concentration of these components in Malaysia domestic wastewater and to establish the effects of the concentration on the efficiency of the treatment process.

Samples taken from treatment plants will be subjected to tests for BOD, NO₃ N, NH₃ N, PO₄ ³⁻, SS, pH and temperature. Results of these testing will yield typical ranges of concentration of nitrogen and phosphorous compounds in domestic wastewater and, relationship between the concentration of these compounds and the efficiency of BOD removal, will be established.

The results are contradictory to established findings. This thesis also discusses the possible causes of the above contradictions.

ii

TABLE OF CONTENTS

¢

i	PAGI
DECLARATION	
ACKNOWLEDGEMENTS	i
ABSTRACT	ii
TABLE OF CONTENTS	iv
LIST OF FIGURES	vii
LIST OF TABLES	viii
LIST OF ABBREVIATIONS	ix
LIST OF APPENDICES	x
LIST OF PICTURES	x

4.

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