

TABLE OF CONTENT

TITLE	PAGE
Acknowledgements	iv
Abstract	v
Table of Content	vii
List of Tables	xi
List of Figures	xiii
List of Plates	xv
List of Nomenclature	xvi
List of Appendices	xviii

CHAPTER I

INTRODUCTION

1.1 Background	1
1.2 Problem Statements and Needs of Study	7
1.3 Objectives and Scope of Study	8

CHAPTER II

LITERATURE REVIEW

2.1	Introduction	10
2.2	Waste Generation	11
2.3	Waste Composition/ Characteristic	17
2.4	Solid Waste Management	22
2.5	Concerns over Solid Waste Management	23
2.6	Waste Management Practice	25
2.6.1	Landfill	26
2.6.2	Incineration	27
2.6.3	Biological Process	29
2.6.4	Ocean Dumping	30
2.7	Public Opinion/ Attitude towards Waste Management	31
2.8	Waste Management Scenario in Malaysia	36
2.9	Integrated solid waste management	39
2.10	Tourism in Islands and Solid Waste Management	42
2.11	Solid Waste Management in Islands: Practice, Issue & Challenges	46
2.11.1	Case study: Small Island Developing States (SIDS)	46
2.11.2	Case study: Pacific Island – Guam	48
2.11.3	Case study: Pacific Island – Saipan	51
2.11.4	Case study: Pacific Island - Republic Of Palau	53
2.11.5	Case study: Green Island, Taiwan	56
2.11.6	Case study: Sri Lanka	58
2.11.7	Case study: Caribbean Islands	59
2.11.8	Case study: Hong Kong	61

2.11.9 Case study: Singapore	63
------------------------------	----

CHAPTER III

METHODOLOGY

3.1 Site/ Island Description	66
3.1.1 Redang Island	67
3.1.2 Tioman Island	69
3.1.3 Pangkor Island	71
3.1.4 Langkawi Island	72
3.2 Waste Generation Estimation	74
3.3 Sample Collection and Segregation	75
3.4 Laboratory Sample Analysis	78
3.5 Survey (Interviews, Questionnaires and On-site Observations)	79

CHAPTER IV

RESULTS AND DISCUSSION

4.1 Introduction	82
4.2 Redang Island	83
4.2.1 Population and Solid Waste Generation	83
4.2.2 Solid Waste Management	84
4.2.3 Composition of Waste	88
4.2.4 Survey results	90

4.3	Tioman Island	95
4.3.1	Population and Solid Waste Generation	95
4.3.2	Solid Waste Management	96
4.3.3	Composition of Waste	100
4.3.4	Survey results	102
4.4	Pangkor Island	107
4.4.1	Population and Solid Waste Generation	107
4.4.2	Solid Waste Management	108
4.4.3	Composition of Waste	111
4.4.4	Survey results	115
4.5	Langkawi Island	120
4.5.1	Population and Solid Waste Generation	120
4.5.2	Solid Waste Management	121
4.5.3	Composition of Waste	124
4.5.4	Survey results	128
4.6	General Discussion – a Comparison between Islands	133
4.6.1	Population and Solid Waste Generation	133
4.6.2	Solid Waste Management	134
4.6.3	Composition of Waste	139
4.6.4	Survey results	141

CHAPTER V

CONCLUSION AND RECOMMENDATIONS

5.1	Introduction	146
5.2	Population and Solid Waste Generation	146
5.3	Solid Waste Management	147
5.4	Composition of Waste	147
5.5	Survey results	148
5.6	Recommendations	148