

FACULTY OF ARCHITECTURE PLANNING AND SURVEYING
DEPARTMENT OF BUILDING SURVEYING

THE COMPARISON
OF THE EFFECTIVENESS MANAGEMENT OF SOLID WASTE DISPOSAL
BETWEEN DBKL AND ALAM FLORA SDN. BHD.

This dissertation was undertaken and completed as a requirement to obtain the Degree of Building Surveying (Hons) from the Mara University of Technology, Shah Alam.

Prepared By: Norazira Binti Saidun

Session: Final Year (2002/2003)

LIST OF CONTENTS

Synopsis		i
Acknowledgement		iii
List of Contents		iv
List of Figure		ix
List of Table		xiii
List of Photo		xvi
List of Abbreviation		xvii
List of Appendix	- Form of Interview	xix
	- Newspaper Cutting	xxii

CHAPTER 1 - INTRODUCTION

1.1	General	1
1.2	Problem Statement	3
1.3	Definition of Topics	5
	1.3.1 Definition of Effectiveness	5
	1.3.2 Definition of Solid Waste	5
	1.3.3 Definition of Solid Waste Management	7
1.4	Objectives of The Study	8
1.5	Scope of The Study	8
1.6	Format of The Dissertation	9
1.7	Research Methodology	11
1.8	Conclusion	12

CHAPTER 2 - A REVIEW OF SOLID WASTE DISPOSAL SYSTEM

2.1	Classification of Solid Waste	13
2.2	Sources of Solid Waste	19
2.2.1	Domestic/Residential Solid Waste	19
2.2.2	Commercial and Institutional Solid Waste	20
2.2.3	Municipal Solid Waste	21
2.3	Factors Considered in Solid Waste	26
2.3.1	Introduction	26
2.3.2	Storage of Solid Waste at The Sources	31
2.3.2.1	Effects of Storage on Waste Components	31
2.3.2.2	Types of Containers	33
2.3.2.3	Container Location	37
2.3.3	Solid Waste Collection	39
2.3.3.1	Types of Collection System	39
2.3.3.2	Collection Vehicle Routing	48
2.3.4	Transfer and Transport	49
2.4	Development in Solid Waste Disposal System	50
2.4.1	General	50
2.4.2	Dumping Ground or Controlled Tipping	51

2.4.3	Sanitary Landfill	55
2.4.3.1	Trench Method	60
2.4.3.2	Area Method	62
2.4.4	Incineration	63
2.4.4.1	Type of Incinerator	65
2.4.5	Recycling	67
2.4.6	Composting	73
2.5	Conclusion	78

CHAPTER 3 - SOLID WASTE MANAGEMENT

3.1	Introduction	79
3.2	The Waste Management Hierarchy	84
3.3	Planning in Waste Management	85
3.4	Management Consideration	99
3.5	Conclusion	106

CHAPTER 4 - CASE STUDIES AND MANAGEMENT COMPARISON

4.1	Introduction	107
4.2	Local Authority	108
4.3	Definition of Local Authority	109

4.4	Case Study No. 1- Dewan Bandaraya Kuala Lumpur (DBKL)	112
4.4.1	Background of Dewan Bandaraya Kuala Lumpur (DBKL)	112
4.4.2	Kuala Lumpur Solid Waste Generation	115
4.4.3	Kuala Lumpur Solid Waste Constituents	120
4.4.4	Factors Influence The Management of Solid Waste	121
4.5	Case Study No. 2 – Alam Flora Sdn. Bhd. (AFSB)	138
4.5.1	Background of Alam Flora Sdn. Bhd. (AFSB)	138
4.5.2	Alam Flora Sdn. Bhd. Profile of Company	139
4.5.3	Factors Influence The Management of Solid Waste	140
4.6	Conclusion	172

CHAPTER 5 - COMPARISON AND ANALYSIS

5.1	Introduction	173
5.2	Preparation of Formal Interview	174
5.3	Formal Interview Structure	175
5.4	Comparison Approach Analysis Technique	176
5.5	Comparison Approach of the Case Study	177
5.6	Analysis	179
5.7	Summary of Analysis	187
5.8	Problems Findings	191
5.8.1	Short Term-Problems	191
5.8.2	Long Term-Problems	192