

**UNIVERSITI TEKNOLOGI MARA  
CAWANGAN SEGAMAT JOHOR**

**INTEGRATED DISPOSAL WASTE MANAGEMENT SYSTEM  
A CASE STUDY OF MAJLIS DAERAH SIMPANG RENGAM AT  
THE STATE OF JOHOR**

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## TABLE OF CONTENT

	<b>PAGE</b>
ACKNOWLEDGMENT	
TABLE OF CONTENT	iii
EXECUTIVE SUMMARY	v
ABBREVIATION & TERMINOLOGIES	vii
LIST OF FIGURES	viii
LIST OF TABLE	viii
<b>CHAPTER 1 INTRODUCTION</b>	
1.1 Introduction of the study	1
1.2 Problem Statement	3
1.3 Objective of the study	6
1.4 Constraint of the study	7
1.5 Significance of the study	8
<b>CHAPTER 2 COMPANY PROFILE</b>	
2.1 The Company	9
2.2 Department and Activities	10
2.3 Health and License Department	10
2.4 Organizational Chart	11
2.5 Local Authorities Constraint	12
<b>CHAPTER 3 LITERATURE REVIEW</b>	
3.1 Current Disposal Practices in Asia	13
3.2 Solid Waste Management in Malaysia	14
3.3 Solid Waste Management In Singapore	20
3.4 Tajiguas Landfill in USA	28
3.5 Solid Waste Management in Hungary	32
<b>CHAPTER 4 THE MALAYSIAN LOCAL AUTHORITY OVERVIEW</b>	
4.1 Background	35
4.2 Current Disposal Method	36
4.3 Environmental Consideration	37
4.4 Public Health	38

## **EXECUTIVE SUMMARY**

In Malaysia, the local authority have been responsible for solid waste management services. However, over the years, various weaknesses in the local authority implementation aspect, financial and technical aspects, have led to inefficiency in the providing the services to the people alike. The increasing waste generation and the least environmental awareness among the general public increase the burden to the local authority. To reduce the burden, the privatization process was initiated in 1996 with the aim of attaining an efficient management system to enhance environmental quality through resource, re-use and waste minimization. However, the negative attitude of the people towards a number of waste management issues that may hinder the implementation of effective privatized solid waste management options.

This project which is part of the fulfillment for an Executive Master of Business Administration at the University of Technology MARA, Malaysia, is trying to unveil the strategic management of waste disposal of local authority in a small town of Simpang Renggam which is 70km from the city of Johor Bahru, Malaysia.

The scope of the study was mainly on the general solid waste management and activities, and the related parties. As the Malaysian has moved towards an integrated approach to solid waste management rather than reliance on a single method, therefore it has begun to look to other, more experienced countries such as Japan, Singapore, USA and Holland to provide models for structuring integrated systems. The purpose of this study was to evaluate Malaysia's integrated solid waste management systems, giving special attention to, and performing close analysis of its sanitary landfill and other related technique like re-cycling activity. In addition, this study focused on the environmental regulatory setting within which these solid waste management activities are conducted.

# CHAPTER 1

## INTRODUCTION

### 1.1 Introduction of the study

Solid waste management is an integral part of public health and environmental control, being of particular importance in highly populated urban areas such as Johor. The present disposal method for solid waste is generally open dumping, with associated water pollution and public health problems. Upgrading open dumps into properly managed, environmentally acceptable landfill sites must be the first priority. However, this can be very difficult in practice, due for example to the lack of suitable sites, potential water pollution problems, shortages of cover material and the people attitude towards aspect of proper waste disposal management.

The most common waste collection method Malaysia was through communal bins and the wastes disposed in open dumps, normally without ground cover or control for leaching. It was reported that in 1990 (Mourato 1999), there were 230 official dumping sites with less than 2 years of operating life. About half of these sites were open dumps. It was also reported that there were 3 times more unofficial dumping sites (Agamuthu 2001).

The capita generation of solid waste in Malaysia varies from 4.45 to 1.44 kg/day depending economic status of an area. In general, the per capita generation rate is about 1 kg/day. Malaysian solid wastes contain very high organic waste and consequently high moisture content and bulk density of above 200kg/m<sup>3</sup>. A study conducted in Kuala Lumpur has revealed that the amount of organic wastes of residential range from 62 to 72 %. Disposal of solid waste is done almost solely through landfill method. In most cases, open dumping is being practiced and takes place at about 50% of the total landfills.