PRACTICES OF MUNICIPAL SOLID WASTE MANAGEMENT IN NILAI, NEGERI SEMBILAN

BY

LIM BOON LEK

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DECLARATION BY THE CANDIDATE

I, LIM BOON LEK, II1008453 confirm that the work in this report is my own work and the appropriate credit has been given where references have been made to the work of other researchers.

Student Name : LIM BOON LEK
Student ID : II1008453
Date : 29 April 2015
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ABSTRACT

Solid waste is waste that is produced either by residential, commercial or industrial sectors of society. Municipal solid waste is mainly produced from residential and commercial sources as domestic waste. Throughout the year, as the population of Malaysia increases drastically the production of municipal solid waste increases as well. Without proper municipal solid waste management, the huge amount of municipal solid waste that is produced will not be able to be treated in a short time and it will damage the environment and also cause uncomfortable surroundings for the public.

This report is to investigate the current practice of municipal solid waste management in Nilai, Negeri Sembilan by finding out the technique that is being used for their municipal solid waste management and also to evaluate the level of satisfaction amongst the residents toward the current municipal solid waste management provided by SWM Environment Sdn Bhd. In order to carry out the study, a questionnaire was distributed and quantitative analysis was carried out, interviews were also carried out with the local council Majlis Pembandaan Nilai (MPN) and SWM Environment Sdn Bhd to help in the evaluation of the current municipal solid waste management. At the end of the report, a better management for the municipal solid waste will be proposed for further studies.

The results from the questionnaire show that most of the respondents are not satisfied with the efficiency of the garbage truck service provided by the company and also that they feel that the garbage truck does not collect a variety of solid waste. However, through the interview with the project manager of the SWM Environment Sdn Bhd, it was discovered that the collection of all types of solid waste was carried out weekly but the public did not know the difference between the truck which collects municipal solid waste and the one that collects garden or bulky waste.

It also reveals that general public compliance is very important, as the public should know their role and responsibility toward the generation of municipal solid waste. The public can help by sorting out the solid waste before they put it into the bin. Recycling can also help in reducing the production of solid waste, and as some of the unwanted waste is recyclable there will be less landfill area needed.

A proper municipal solid waste management is very important as it helps in ensuring the solid waste is taken to a suitable disposal site and also treats the solid waste so it will not cause any damage to the environment.
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LIST OF ABBREVIATIONS

CO₂ — Carbon Dioxide  
MPN — Majlis Pembandaran Nilai  
MRF — Material Recovery Facilities  
Sdn. Bhd. — Sendirian Berhad  
SWG — Solid Waste Generation  
SWM — Solid Waste Management  
Etc — Et cetera
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CHAPTER 1

INTRODUCTION

1.1 Introduction

This chapter discusses the introduction of the study. It represents the overview of the study and briefly explains the background, aim, objectives, key question, problem statement, research methodology as well as the outline and content of the research.

1.2 Introduction of project title

Solid waste is waste which is produced either from residential, commercial, or industrial activities. It can be categorized as non-hazardous waste or hazardous waste depending on its hazard potential. Solid waste management is the systematic management of waste flows through monitoring, collection, transport, processing, recycling and disposal. The management helps to reduce or eliminate the unfavorable impact on the environment and also to improve the quality of life.

Over the years, as the population in Nilai has increased, the solid waste produced has also relatively increased. There are a few acts and strategies that have been implemented for solid waste management in Malaysia starting in the late 1960s, however the Solid Waste and Public Cleansing Management Act 2007 (Act 672) was not formally implemented until 2011 and involved 52 local authorities in eight states in Malaysia. It is crucial for a country to have a good municipal solid waste management program as it can achieve improvement in the quality of life.