

**INTI INTERNATIONAL UNIVERSITY**

**WASTE MANAGEMENT IN CONSTRUCTION SITE**

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### **DECLARATION BY THE CANDIDATE**

I Chua Mei King (I09004125) 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.



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## ABSTRACT

Nowadays, the topic of environmental friendly is popular in construction industry in Malaysia. The control of wastes is one of the ways to achieve the eco-friendly status in the construction industry. An improper and failure in implementation of construction waste management will cause higher costs and effect to our safety and health.

Construction sector is playing a vital role in every developing country. Waste in the construction industry has been the subject of several research projects around the world in recent years. Some of them have focused on the environmental damage those results from the generation of material waste. Wyatt (1978) stressed the consequences of high levels of waste in both reducing the future availability of materials and energy, and creating unnecessary demands on the transportation system.

The overconsumption and inefficiently used of materials was caused the presence of the waste getting worse. Waste was caused a lot of problems to the human. This dissertation aimed to identify the current issue of waste management in Malaysia and determine how the construction waste had been managed in order to propose a proper method in managing the construction waste to reduce the waste in construction site. The research methodologies used were desk study and questionnaire research. The experience contractors targeted and invited to complete a survey on how the construction had been managed for a project. This research is in assists the construction player in improving the waste management in term of construction materials.

Key word: Construction waste, Construction waste management, Lean construction

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## LIST OF ABBREVIATIONS

No.	ABBREVIATIONS	FULL NAME
I	BIM	Building Information Modelling
II	CIDB	Construction Industry Development Board Malaysia
III	DOE	Department of Environment
IV	EPA	Environment Protection Act
V	GBI	Green Building Index

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## CHAPTER 1

### INTRODUCTION

#### 1.0 Introduction and Background

The industry generates employment opportunities and injects money into a nation's economy by creating foreign and local investment opportunities (M. Agung, 2009). However, despite these contributions, the construction industry has also been linked to global warming, environmental pollution and degradation (Jones & Greenwood, 2009). By the increasing of standard living, changes in consumption habits, natural increase in population as well as the improvement of technology the amount of waste has increased significantly. The result of these circumstances is the increase more and more construction projects and a higher level of construction activity was caused construction waste has become a serious problem in many countries. Beside that the increasing in demand of infrastructure, commercial buildings and housing development projects which has generated large amounts of construction waste. There are numerous of reports and journal have investigated issue in waste which lead to negative impact to the environment, cost productivity, time, social and economic.

Waste management which can be refer to collection, transport, processing or disposal, managing and monitoring of waste materials. In Malaysia, the waste level is considerably high and the solid waste management has been a concern in Malaysia for some time.

Malaysians produce approximately 25,600 tonnes of waste daily, in response to rapid development and urbanisation (Fazleena Aziz, 2010).

Reducing construction site waste can reduce both of the cost of raw material purchase and the cost of disposing of the waste created on site. Besides that it also can reduce the wastage due to the inefficiency on site such as source separation can reduce the amount of the waste resulting from commingled disposal. It is estimated that 80% of a homebuilder's waste stream is recyclable. If planned waste recovery for reuse and recycling can tremendously reduce the amount of waste is destined for disposal and landfill. This can also open up secondary resources streams of building materials. Since building construction is a business, it will be to the advantage to the contractors or builders to adopt waste management method that reduces liability to jobsite waste. Equally important is the need give the contractors builders to build a good public image as a green practitioner. Such an image will give contractors or builders an edge in business as a preferred service provider.