

**CLINICAL WASTES MANAGEMENT IN DISTRICT HOSPITALS OF  
TUMPAT, BATU PAHAT AND TAIPING**



**RESEARCH MANAGEMENT INSTITUTE (RMI)  
UNIVERSITI TEKNOLOGI MARA  
40450 SHAH ALAM MALAYSIA**

**BY :**

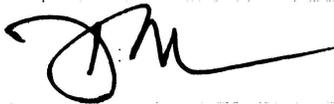
**PROF. DR. DASIMAH BT OMAR  
DR. K. SUBRAMANIAM  
SITI NURSHAHIDA BINTI NAZLI**

**DECEMBER 2013**

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**BORANG TAMAT PROJEK GERAN PENYELIDIKAN**

<b>BAHAGIAN A : MAKLUMAT KETUA PROJEK</b>	
Nama	PROF. DR DASIMAH BT OMAR
Alamat Pusat Tanggung Jawab (PTJ)	FSPU SHAH ALAM
Tajuk Projek:	CLINICAL WASTE MANAGEMENT IN DISTRICT HOSPITALS OF TUMPAT, BATU PAHAT AND TAIPING
<b>BAHAGIAN B : MAKLUMAT PROJEK PENYELIDIKAN</b>	
No Rujukan Projek RMI	: 600-RMI/ST/DANA 5/3/Dst (448/2011)
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<b>BAHAGIAN C : HASIL PENYELIDIKAN</b>	
<b>Penerbitan Berindeks</b> (Tajuk dan Penerbit)	Clinical Waste Management in District Hospitals of Tumpat, Batu Pahat and Taiping AicE-Bs 2012 Cairo: ASIA Pacific International Conference on Environment-Behaviour Studies: Mercure Le Sphinx Cairo Hotel, Giza, Egypt, 31 October – 2 November 2012 <i>"Future Communities: Socio-Cultural &amp; Environmental Challenges"</i>
<b>Harta Intelekt</b> (No Patent/No IP)	tiada
<b>Pelajar yang di latih</b> (Nama, KP, Kod Program)	Siti Nurshahida Nazli, 2010698234, AP780
Tandatangan Ketua Projek	 Tarikh : 08 Disember 2013
Pengesahan RMI	Tarikh :

## **5.2 Enhanced Executive Summary**

The research is a cross-sectional comparative study carried out to determine the variations and similarities in the activities of clinical waste management practices within three district hospitals located in Johor, Perak and Kelantan. Using physical observation, administered questionnaire and interview questions, sectional data within each hospital were collated and analysed by employing Microsoft Excel and relevant statistical analysis tools like ANOVA. The results showed similarities in many areas, confirming that similar activities take place within the hospitals and variations in other areas confirming that many factors both external and internal affect the clinical waste management and other activities within the hospitals. Studies revealed many deficiencies in the management mostly weaknesses in segregation process.

*Key- words: clinical waste management, generation, segregation, storage*

### 5.3 Introduction

This section provides an overview of the research on clinical waste management. The study is to determine and assess the clinical waste management in Malaysia that focuses on clinical waste management in district hospitals. The clinical waste management study covers the critical aspects in the process of clinical waste generation, separation, collection, transportation, storage, treatment and final disposal. It also examines the level of knowledge and awareness of the hospital personnel towards the clinical waste management in the hospitals. Although 75 percent to 90 percent of hospital waste is a non-hazardous waste which is general waste, the remaining 10 percent to 25 percent of the waste is regarded as hazardous and may create a variety of health risks (MOH, 2009). Hospital waste is a potential reservoir of pathogenic micro-organisms that requires appropriate, safe and reliable handling. All transportation and disposal of clinical waste in Malaysia is regulated under the Environmental Quality (Scheduled Waste) Regulations 2005. Based on the notification on scheduled waste by the Department of Environment Malaysia, in 2010 is 42,029.33 million tonnes . Figure 1 below shows the generation of clinical waste in Malaysia from 2004 until 2010.

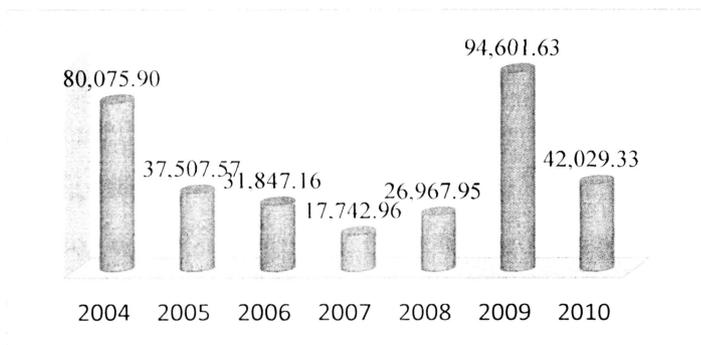


Fig 1. Clinical waste generation in Malaysia from 2004 until 2010 (Metric tonnes/year)

Improper management of clinical waste management can create many problems especially threats to the health, safety and environment. The Ministry of Health (2009) stated that other most common issues faced by clinical waste management are the improper waste segregation at source.