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The study of municipal solid waste generation at Gong Badak residential area Kuala Terengganu / Chin Jun Jie.

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THE STUDY OF MUNICIPAL SOLID WASTE GENERATION AT
GONG BADAK RESIDENTIAL AREA KUALA TERENGGANU

By
CHIN JUN JIE

A PITA report submitted in partial fulfillment of
the requirements for the award of the degree of
Bachelor of Technology (Environment)

SCHOOL OF OCEAN ENGINEERING
UNIVERSITI MALAYSIA TERENGGANU
2016

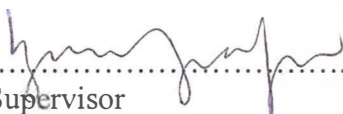


**SCHOOL OF OCEAN ENGINEERING
UNIVERSITI MALAYSIA TERENGGANU**

VERIFICATION AND APPROVAL FORM

This PITA research report entitled *The Study of Municipal Solid Waste Generation at Gong Badak Residential Area Kuala Terengganu* prepared and submitted by Chin Jun Jie, Matric No UK29521 in partial fulfillment of the requirements for the award of the degree of Bachelor of Technology (Environment) has been examined and is recommended for approval of acceptance.

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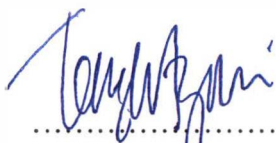
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I hereby declare that this PITA research report entitled *The Study of Municipal Solid Waste Generation at Gong Badak Residential Area Kuala Terengganu* is the result of my own research except as cited in the references.

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Last but not least, I would like to thanks all the friends who help me during this study. The support from them helps me very much in this final year project.

THE STUDY OF MUNICIPAL SOLID WASTE GENERATION AT GONG BADAK RESIDENTIAL AREA KUALA TERENGGANU

ABSTRACT

The study was aimed to determine the generation and characteristics of municipal solid wastes generation in Gong Badak residential area. The percentage of wastes generated was food waste (64.5%), plastic waste (20.9%), paper waste (8.5%), glass waste (2.1%), other type of waste (1.7%) and metal waste (0.9%). This study was significant to determine the reasons that caused the large amount of municipal solid wastes generated in residential area. Recommendations on the effective management of municipal solid wastes can be provided. It was important because landfill in our country not able to accumulate the large amount of municipal solid waste generated from residential area. A survey was carried out in order to determine the generation of municipal solid wastes. The houses were selected randomly in Gong Badak residential area. The results revealed that the lower socioeconomic status of residents, the larger the estimated amount of food wastes generated in residential area. The environmental awareness was found not associated with the generation of municipal solid wastes. Although majority of residents aware of the importance of separation of recyclable wastes and food waste but most residents did not separate them in daily life. Some of the reasons included lack of facilities, too much effort needed to separate the wastes and other reasons. Other reasons included lack of recycling companies and cost to buy the plastic bag to fill the separated wastes. The increase of family size caused the increase of the estimated amount of municipal solid wastes generated in residential area. Based on this study, it is recommended that recycling facilities should be provided in residential area in order to make convenience for the residents to have waste separation habit.

KAJIAN MENGENAI PENGHASILAN SISA PEPEJAL PERBANDARAN BAGI KAWASAN PERUMAHAN GONG BADAK KUALA TERENGGANU

ABSTRAK

Kajian ini bertujuan untuk mengenal pasti ciri dan penghasilan sisa pepejal perbandaran di kawasan perumahan Gong Badak. Peratusan penghasilan sisa pepejal adalah sisa makanan (64.5%), sisa plastik (20.9%), sisa kertas (8.5%), sisa kaca (2.1%), jenis sisa lain (1.7%) dan sisa logam (0.9%). Kajian ini penting untuk mengenal pasti punca yang menyebabkan penghasilan sisa pepejal perbandaran sangat banyak di kawasan perumahan. Cadangan untuk pengurusan sisa pepejal perbandaran yang berkesan boleh disediakan. Ini adalah penting kerana tapak pelupusan di negara kita tidak dapat menampung sisa pepejal perbandaran yang banyak dari kawasan perumahan. Kajian soal selidik telah dijalankan untuk mengenal pasti penghasilan sisa pepejal perbandaran. Rumah telah dipilih secara rawak dari kawasan perumahan Gong Badak. Hasil kajian mendedahkan bahawa penduduk yang mempunyai status sosioekonomi yang rendah adalah menghasilkan kuantiti sisa makanan yang lebih banyak. Kesedaran terhadap alam sekitar didapati tidak berhubung kait dengan penghasilan sisa pepejal perbandaran. Walaupun ramai penduduk sedar kepentingan pengasingan sisa yang boleh dikitar semula dan sisa makanan tetapi ramai penduduk tidak mengasingkan sisa dalam kehidupan seharian.. Antara sebabnya adalah kekurangan kemudahan awam, terlalu banyak usaha diperlukan dan sebab-sebab lain. Sebab-sebab lain meliputi kekurangan syarikat kitar semula dan keperluan kos membeli plastik beg untuk mengisi sisa yang sudah diasingkan. Saiz keluarga yang besar mengakibatkan penghasilan sisa pepejal perbandaran yang lebih banyak. Berdasarkan kajian, adalah dicadangkan kemudahan kitar semula perlu disediakan di kawasan perumahan supaya memudahkan penduduk mengamalkan tabiat pengasingan sisa.