

**CASE STUDY ON GROUNDWATER MONITORING AT PULAU
BURUNG LANDFILL**

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Progress report is submitted as the requirement
for the subject of Final Project (KJC527)
Bachelor Engineering (Hons) (Civil)

UNIVERSITY TEKNOLOGY MARA

NOVEMBER 2006

DECLARATION BY THE CANDIDATE

I, Jamaluddin bin Bahari, UITM NO 2003339613 confirm that work is my own and that appropriate credit has been given where reference has been made to the work of others.



(Jamaluddin bin Bahari)

NOVEMBER 2006

ACKNOWLEDGEMENT

In the name of God, with his permission, this project has been successfully to be complete. Thanks for God on his blessing and helps.

I would like to express my deepest and sincere gratitude to my supervisor and also my lecturer, Pn. Nor Lila bt. Shuib for her guidance, advice, comment, encouragement and cooperation that had be given in the completing this project.

I would also like to tank all lecturers and staff of Civil Engineering Faculty, especially to Puan Rokibah bt Arrifin, as laboratory technician of Environment Laboratory UiTM Pulau Pinang on her kind and helpful. Not forget to En.Sufian, the landfill engineer, Mr.Harun, Mr.Fazli and other staff in Idaman Bersih Sdn. Bhd for their kindness and assistance during the preparation of this project.

Lastly, I would like to express my special gratitude to my beloved family and my friends for their encouragement and support in completing this project. Thanks for all.

ABSTRACT

Groundwater monitoring is important to determine the groundwater quality at landfill area. Groundwater monitoring is done to ensure the landfill activity does not affect the environment especially to groundwater. To acquire this target, the monitoring is done for 8 week continuously. The sample is collected and tested based on their physical and chemical characteristics. It is important to determine the groundwater quality which it can be contaminated by leachate from solid waste. The increasing amount of solid waste every day will produce more leachate that has high potential to contaminate the groundwater. Besides, this groundwater quality study also includes the new area that will be proposed for the development of Level 3 Sanitary Landfill. Thus comparison will be made between this new area and the present landfill area. In this research, groundwater is determined by physically and chemically especially to determine the presence of heavy metals in groundwater. Heavy metal contamination is so dangerous and harmful to any life especially to human. This study is essential in order to improve the efficiency and effectiveness of landfill system and their management to protect the environment.

Keywords: Groundwater, solid waste, leachate, water quality, groundwater contamination

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