DOMESTIC WATER QUALITY MONITORING AT SEBERANG PERAI TENGAH, PULAU PINANG

SITI ROHANY SHARUDDIN

Bachelor Engineering (Hons) (Civil)
UNIVERSITI TEKNOLOGI MARA
2006

DOMESTIC WATER QUALITY MONITORING AT SEBERANG PERAI TENGAH, PULAU PINANG

Ву

SITI ROHANY SHARUDDIN

Report is submitted as the requirement for the degree of Bachelor Engineering (Hons) (Civil)

UNIVERSITI TEKNOLOGI MARA NOVEMBER 2006

DECLARATION BY CANDIDATE

I Siti Rohany bte Sharuddin, UiTM no 2003339890 confirm that the work is my own
and that appropriate credit has been given where reference has been made to the work of
others.
(NOV 2006)
(NOV 2006)

ACKNOWLEDGEMENT

In The Name of Allah, The Most Beneficent and The Most Merciful. All praises to Allah,

God of the universe and peace be upon his messenger.

I would like to give my appreciation to all individual and group that had been helping

me in preparing my research project. I am deeply indebted to my supervisor, Cik

Shazwani binti Muhammad, for her guidance, comments and suggestion during the

process of completing this project.

I would also like to thank Perbadanan Bekalan Air Pulau Pinang (PBAPP), especially

Mr. Zani and Mr. Rashidi as an officer site at Sungai Dua Water Treatment Plant for

providing the useful information and the required data in completing this project.

I would also like to extent my appreciation to my family, especially my parents Mr.

Sharuddin bin Buyong and Mrs. Rosmah binti Johnit for their support and

understanding, also to lab environmental technician, Rokibah binti Ariffin for helping

me while doing this project.

Last but not least, I would like to thank to UiTM and all those involved, either directly

or indirectly in making this project till success.

Thank you.

ii

ABSTRACT

As Penang marches towards the 21st Century, our water demand will continue to increase, even as water supply issues become increasingly complex. As such, we need to manage water supply more effectively and innovatively. It also to determine the value of pH, suspended solid (SS), turbidity, residual chlorine and conductivity of the domestic water supplied in Seberang Perai Tengah according the sampling point are Kampung Paya, Kubang Semang, Kubang Ulu, Permatang Pasir and Permatang. The results obtained are expected to fulfill the Malaysian Standard and WHO. From the sampling result raw water and treated water, the results observed the change of the concentration of the sample before and after treatment for pH, turbidity and residual chlorine. The comparison were made between the result obtain with the standard quality of water. It is obtained that the result fulfills the Effluent Discharge Standards to Malaysian Inland Waters, Standard A. In water quality study, samples were taken from sampling points and treatment plants in Pulau Pinang. The laboratory test on water quality was conducted. The samples were taken one time every week, started from July 25, 2006 until August 29, 2006. Each sample taken was tested to determine the values of pH, SS, conductivity, turbidity and residual chlorine. The comparison were made between the result obtain with the standard quality of water. It is concluded that the result fulfills the National Standard for Drinking Water.