

**THE DETERMINATION OF GROUNDWATER CONTAMINATION
BY LEACHATE AT PULAU BURUNG SANITARY LANDFILL : A
CASE STUDY**

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DECLARATION BY THE CANDIDATE

I am Nadiah Bt Azemi, UiTM no. 2003345859 confirm that the work is my own and that appropriate credit has been given where reference has been made to the work others.

Signature :.....

Date :.....

ACKNOWLEDGEMENT

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ABSTRACT

Among the more significant large municipal facilities to impact the quality of shallow groundwater are landfills and cemeteries. However, for the research, the quality of groundwater of landfills selected to be determined. The pollution of shallow groundwater at Pulau Burung Sanitary Landfill is characterized and recommendations made for mitigating the facilities' impact. At landfill site, five groundwater well has been selected and sampled. Then the selected samples are analyzed and tested chemically and physically. The investigation at the landfill revealed typically under low levels of contamination except for those new sampling point which cannot be labeled critically contaminated for concrete reasons. The investigation also particularly regards to metals. Grouting and the use of gum trees as a pressure barrier are recommended for the downflow margins of the landfill. Conditions at the landfill could also be treated with locally available iron and sulphate minerals and by revegetating the top of the dump. The problems experienced at the landfill site will be covered by environmental and geotechnical considerations are given priority in site selection such priorities.

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