## WATER QUALITY PARAMETERS MEASUREMENT AT A FORMER TIN MINING LAKE AT KAMPUNG GAJAH, PERAK

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### **ABSTRACT**

# WATER QUALITY PARAMETER MEASUREMENT AT A FORMER- TIN MINING LAKE AT KAMPUNG GAJAH, PERAK

Nowadays, the importance of ex- mining lake quality has become vital and the significance of ex- mining lake quality could not be denied anymore. Study been carried out in order to identify the water quality of ex- mining lake at kampung Gajah, Perak. The lake was function as training centre for UITM and also been utilize for human activities especially for fishing. Besides that, residential area is located adjacent to the lake. Due to effluents from the residential area and mining activities that have done long years ago large amount of waste materials still remain in the water, thus water quality at the catchments area quite doubtful from the aspect of water quality including nutrients concentration and metals concentration. For that reason, this study is aim to determine the quality of lake water including turbidity, temperature, COD, BOD, TSS, pH, DO, NO<sub>3</sub>, AN and mercury during the two season, dry season and wet season. The samples are collected from fifteen sampling point and analyzed. These parameters are compared to National Water Quality Index (WQI). From overall WQI calculated, the overall quality of the water based on the parameters pH, COD, BOD, TSS, AN and DO was 55.2 and considered as polluted. From the findings, it be concluded that the lake water are hazardous to human health and not saved to be used as a drinking water directly and other activities such as swimming, sport activities and for recreational area utilization due to high concentration of NO<sub>3</sub>.