

Preliminary assessment of lakes water quality status at campus area in Selangor, Malaysia

ABSTRACT

A study was conducted to assess the water quality status of Engineering and Serumpun Lakes located in campus area. Selected water quality parameters (Biochemical Oxygen Demand - BOD, Chemical Oxygen Demand - COD, Dissolved Oxygen - DO, turbidity, Suspended Solids - SS, pH and Ammonia Nitrogen-NH₃-N) were determined for about two months observation in the wet season and the average results were compared to Malaysian standards. The status of lakes were determined by using Water Quality Index (WQI) and classified according to the Interim National Water Quality Standards (INWQS), Malaysia. The observed values for seven parameters of Engineering Lake were classified as IIA/B and V classes as well as Serumpun Lake. From the results, the lakes can be used for recreational purposes. However, based on WQI calculated value, the status of the lakes during the study period was indicated as polluted; 31.6 and 32.5 for Engineering and Serumpun lakes, respectively. Both lakes were classified as Class IV and the water suitable for irrigation uses only.

Keyword: Lakes; Malaysian standard; water quality index; water quality parameters