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The Risk Assessments of Water Quality in Selected White Water River in Malaysia

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Abstract: The research on water quality based on 'Water Quality Index' (WQI) has been on the run along Kampar River in Perak State of Malaysia. This study was conducted to achieve several key objective that determe the value of the parameters that were studied based on Water Quality Index (WQI). The parameters include Dissolved Oxygen (DO), pH, Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD) and Suspended Solids. In this study, three sampling stations were selected. Through observations from the researchers, several pollutions were found occurring along the research area such as the disposal of waste water directly without treatment from villagers, widespread dumping of solid waste and the development of the surrounding areas that contributed to the pollution of Sungai Kampar in Perak, Malaysia. Sungai Kampar is commonly used for water recreational activities as well as for bathing purposes. Results showed that Sungai Kampar is classified under category III. According to Interim National Water Quality Standard for Malaysia (INWQS), rivers in the third grade are clean but not suitable for river recreational activities. Therefore, there is a requirement to investigate and analysis the water quality of all white water rivers in Malaysia focusing on the area of water activities. The combination of technology and risk management based on risk assessments can help the recreational industry to survive in future.

Keywords: risk assessments, White Water River, water quality index (WQI), Interim National Water Quality Standard for Malaysia (INWQS)

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