

Risk assessment of mercury contamination in surface sediment of the Klang River, Malaysia

ABSTRACT

Total mercury contamination in 21 stations in Klang River. T-Hg concentrations were ranged from 0.02 to 0.45 g g⁻¹ dry weight surface sediments. Enrichment factor (EF), and sediment quality guidelines of threshold effect level (TEL) and probable effect level (PEL) were applied to calculate the degrees of sediment contamination. The mercury EF showed the significant role of the anthropogenic inputs in sediments of Klang River. The result also determined that none of T-Hg concentrations in the sediments were as high as the PEL value, whereas mercury concentrations in some stations exceeded the TEL value.

Keyword: Contamination assessment; Malaysia; Mercury; Organic carbon; Surface sediment