

ESTIMATING PAH SOURCES IN HARBOR SEDIMENTS USING DIAGNOSTIC RATIOS



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This study focuses on the application of various diagnostic ratios as appropriate tools for estimating the polycyclic aromatic hydrocarbon (PAH) ratios across small craft harbours (SCHs) in Nova Scotia, Canada.

APPROACH:

PAH data for this study was extracted from historical sediment data collected by the federal government of Canada. The researchers then cross-examined seven diagnostic ratios for examining PAH levels.

MAIN FINDINGS:

- The results of this study indicate that sediments in Nova Scotia SCHs are dominated by pyrogenic (combustion) PAH sources.
- Multiple ratios further suggest that coal-derived (i.e., coal tar and/or coal combustion) PAH sources are the dominant source.