

Concentrations of atmospheric polycyclic aromatic hydrocarbons in particulate matter and the gaseous phase at roadside sites in Hanoi, Vietnam

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Abstract: We analyzed the concentrations of polycyclic aromatic hydrocarbons (PAHs) in both particulate matter (PM) and the gaseous phase at 10 roadside sites in Hanoi, Vietnam. The average concentrations of 47 PAHs ($\Sigma 47$ PAHs) were $63 \pm 82 \text{ ng m}^{-3}$ in PM and $480 \pm 300 \text{ ng m}^{-3}$ in the gaseous phase. The PAHs mainly originated from motorcycles without catalytic converters. The highest concentrations of $\Sigma 47$ PAHs in both PM and the gaseous phase were observed at a terminal for buses and trucks. The operation of large commercial vehicles led to increased PAH pollution at the terminal site. © 2008 Springer Science+Business Media, LLC.

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