Analysis of the built-up processes for volatile organics and heavy metals in suspended solids from road run-off

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**ABSTRACT**

Road run-off water quality can be significantly impacted by many pollutants deposited on road surfaces through vehicular activities. Any control strategy for the improvement of water quality relating to organic and inorganic pollutants should be based on a detailed knowledge of pollutant built-up processes and the relationship of pollutants to one another. Total volatile suspended solids (VSS), polycyclic aromatic hydrocarbons (PAHs) and heavy metals were estimated in total suspended solids (TSS) collected in two catchments. This study found a good relationship between total VSS and TSS and between TSS and PAHs. This relationship information can be utilized for the development of effective Best Management Practices for TSS control. However, the relationship between TSS and heavy metals was identified as being strong in only some cases.

**Keywords:** Storm water; Pollutant build-up; Volatile organics; Heavy metals

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