Sorption Kinetics of Organic Pollutants on Clay Minerals. M.G. STAPLETON\* and D.L. SPARKS, Univ. of Delaware. Sorption kinetics of organic chemicals has become an area of active research. However, the use of organic compounds

as the adsorbate may present several experimental problems. These include: i) the loss of the adsorbate through sorption to the experimental apparatus and volatilization during the experiment or prior to analysis, and ii) the inability to translate the experimental results to environmental systems.

In this study we evaluated the ability of a stirred flow

reactor to determine the sorption kinetics of selected organic compounds on montmorillonite and illite clays. This method differentiated between transport-related and sorptionrelated nonequilibrium processes. Experimental tests were conducted to distinguish between i) instantaneous equilibrium and time dependent reactions, and ii) kinetic

models dependent and independent of solution concentration.

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