$$\frac{\partial (HC)}{\partial t} = - \underbrace{\boxed{U \frac{\partial (HC)}{\partial x}}}_{\text{Advection}} + \underbrace{\boxed{\frac{\partial}{\partial x} \left(HD \frac{\partial C}{\partial x} \right)}}_{\text{Dispersion}} + \underbrace{\boxed{S}}_{\text{Settle}} + \underbrace{\boxed{R}}_{\text{Transform}} + \underbrace{\boxed{Q}}_{\text{Load}}$$