

## **Concentration of Antifoulant Herbicide, Diuron in the Vicinity of Port Klang, Malaysia**

### **ABSTRACT**

Diuron is one of the alternative compounds that had been introduced by the paint manufacturer to be used in the coating paints. It is used to replace organotin-based paint that is prohibited to be used due to its deleterious effects on non-target organisms. However, significant amount of Diuron that been released resulted from shipping moved was accumulated and contaminated the coastal waterline. Thus, environmental samples (sediment, porewater and surface seawater) were collected from the largest Malaysia shipping port, Port Klang area and extracted quantified for Diuron concentration by using a LC-MS/MS. Results showed range of mean concentration in sediment (2.24  $\mu\text{g}/\text{Kg}$  to 19.28  $\mu\text{g}/\text{Kg}$  hold the highest reading followed by porewater (0.88  $\mu\text{g}/\text{L}$  to 12.91  $\mu\text{g}/\text{L}$ ) and followed by surface seawater samples (N.D to 0.53  $\mu\text{g}/\text{L}$ ). Recovery of samples ranged from 79.72 to 86.56 %. Vessels moored, rapid industrialization, active fishing activities, rich flushing zone are the point sources of Diuron input in the Port Klang area. In conclusion, the founded concentrations exceed previous reported of Diuron concentration. Continues study is suggested to report and monitor the level of Diuron in marine environment.