

**Fate of Trace Elements Present in Industrial Effluents Discharged into River**

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**ABSTRACT**

A reconnaissance survey of the extent of metal contamination in the river Kali was conducted. The river system has been impacted heavily by the discharges of untreated municipal, agricultural and industrial effluents. In the main channel of the river downstream of the industrial complex, the metal contaminations were found to be 3-4 times background. The concentrations of iron, zinc and copper were found to be 0.41, 0.04 and 0.015 mg/L respectively in the upstream (background level) section during October survey. The same were found to be 0.56, 0.07 and 0.016 mg/L during December survey. However the concentration of lead and cadmium were found to be nil during both the surveys.

The river Kali is a typical receiving water course for untreated municipal and industrial effluents. Mass balance calculations conducted for iron, zinc and copper indicate that differences found in load along the river may be mainly due to the contribution of non-point sources of pollution due to agricultural activities. The difference may also be attributed due to some point sources of pollution which could not be identified in the course of investigations.

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