

## **Effect of Waste Disposals on Quality of Water of River Kali UP**

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### **ABSTRACT**

A detailed survey of the river Kali was conducted to understand the nature of pollutants and their effect on the quality of water of the river. From the study conducted, it was revealed that the water in the river Kali is subjected to varying degree of pollution, caused by numerous untreated outfalls of municipal and industrial effluents. The main sources which create pollution in river include, municipal waste of Muzaffarnagar city, industrial waste from variety of industries (such as steel, rubber, ceramic, chemical, plastic, dairy, pulp and paper and loundaries) and Mansurpur sugar mill and distillery waste. The wastes from variety of industries transfer their wastes through Muzaffarnagar main drain into the river.

The report also gave an account of magnitude of pollution caused by the discharges of municipal and industrial wastes. These wastes contain high BOD, COD and total solids. The detailed survey of the river indicate that the river is grossly polluted due to the numerous outfalls of untreated municipal and industrial wastes, thus bringing about a considerable change in the river water quality. Such a change is of significance and has more consequences for rural population on the banks of river downstream. The important characteristic associated with the pollution of the river is the depletion of oxygen over a stretch of about 25 kms.

The mass balance conducted for some water quality constituents for river Kali shows that changes found in load along the river may be mainly due to the contribution of nonpoint sources of pollution. The difference may also be attributed due to some point sources of pollution which could not be identified in the course of investigations.