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THE EFFECT OF INDUSTRIAL,
DOMESTIC AND AGRICULTURAL EFFLUENTS
ON THE QUALITY OF THE WATERS
OF THILA-CHANIA RIVER SYSTEM))

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ABSTRACT

This study was carried out to determine the extent of industrial, domestic and agricultural pollution in the Paika-Chania river system.

Six sampling stations were selected and the monitoring was extended over a period of six months between March and August 1987, during which time a total of 96 samples were collected and analysed.

The following quality parameters were determined for each sample collected - BOD, COD, total dissolved solids, total suspended matter, total phosphates, Lnitrogen, conductivity, pH, temperature and chlorides. The concentrations obtained for the above mentioned parameters, with the exception of chlorides never exceeded 140 mg/l. The highest concentration obtained for chlorides was 655.5 mg/l.

The heavy metal pollutants analysed included iron, copper, chromium, zirconium, titanium and zinc and with the exception of iron, all the other metals monitored never exceeded a concentration of 2.6 ppm, the highest concentration of iron obtained was 39.26 ppm.

The rivers were found to be less polluted with respect to the parameters studied with the exceptions of chloride and iron whose levels exceed most of the recommended standards.

Chlorides and iron concentrations in the river can be reduced by identifying the exact points of discharge of these