INTRODUCTION

When water ecosystem receives an effluent containing organic matter, the resulting chemical and physical changes are accompanied by changes in the flora and fauna of this ecosystem.

Biological systems are continuously changing and, it is important from monitoring point of view to distinguish between natural changes and those caused by man. Changes in biological systems can be measured in various ways, e.g. , species diversity, times of onset of maturation and reproductive success.

Man's activities increase the quantity of biological available toxic trace elements in the aquatic environment. Diffused discharges related to urbanization and technical development in general, together with point discharges from specific industrial activities are contributory factors. Among the multiple pollutant sources introducing sizable amounts of trace elements in the aquatic environment, the following industrial activities appear to be the most important :-

i) Industries producing both organic and inorganic chemicals.

ii) Offshore dumping of domestic sewage, sludges and various industrial wastes.