

C  
363.7  
BAL

1

# **CURRENT POLLUTION STATUS OF VALAICHENAI LAGOON**

**A PROJECT REPORT PRESENTED BY**

**SAMBUNATHAN BALAGOWRY**

to the Board of study in Chemical Sciences of the  
**POSTGRADUATE INSTITUTE OF SCIENCE**

*in partial fulfillment of the requirement  
for the award of the degree of*

**MASTER OF SCIENCE IN ANALYTICAL CHEMISTRY**

of the

**UNIVERSITY OF PERADENIYA  
SRI LANKA  
2005**

**603373**

## **CURRENT POLLUTION STATUS OF VALAICHENAI LAGOON**

**Sambunathan Balagowry**

This project was carried out to investigate the pollution parameters in the Valaichenai lagoon. This project was carried out from July 2002 to November 2002. Although Valaichenai Lagoon is used for fishing, bathing and recreational activity, it was observed that a large number of effluents channels drained into it carry a continuous flow of contaminated water. Also, the garbage from the Valaichenai area is dumped along the bank of the lagoon for several years, and the area appears as a garbage dumping ground.

Lagoon water about 5 m far from the channels was collected in one-liter dark colored polyethylene cans. The pH and temperature were measured at the field. The nitrate, nitrite, phosphate, and COD were measured at the laboratory using a spectrophotometer.

COD is largely contributed to the lagoon from channel L4 (channel from market garbage). Phosphate is largely contributed to the lagoon from channel L4 and L5. Both nitrate and nitrite were gained to the lagoon from channel L3, L4 and L5. Algal bloom was found at the site L3, L4 and L5, where nitrogen, phosphorous and COD were very high.