

PERMANENT REFERENCE

EFFICIENCY OF LOW COST FILTER ON THE TREATMENT OF RICE
MILL, PRAWN FARM AND PAPER MILL EFFLUENT

— A PRELIMINARY INVESTIGATION ON THE PERFORMANCE USING BENCH-SCALE MODEL —



BY

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ABSTRACT

A study had been carried out to find out the efficiency of Low cost filter on the treatment of wastewater from Rice mill, Prawn farm and Paper mill.

The aim of the study was mainly focused on the performance and efficiency of different kind of filtering media used in treatment unit in the separation of Chemical oxygen demand (COD), Nitrate, Phosphate and Turbidity found in the wastewater, collected from different industries. Possibly locally available media such as, Partially burnt coconut shell, Sea sand, River sand, Partially burnt paddy husk and Partially burnt Clay were used in the wastewater treatment unit.

The results of the study revealed that a particular media was found to be best for a particular pollution parameter of the wastewater. It had been found that the combination of Sea sand + Activated carbon + Clay was very suitable and efficient for the separation of COD. Similarly, combination of Sea sand + Clay was efficient for adsorption of Nitrate. Clay was found to be suitable for Phosphate adsorption, whereas Sea sand was excellent media for the separation of Turbidity found in the wastewater

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