

ABSTRACT

Textile industry is one of the most income generating as well as polluting industries in Sri Lanka. The study was carried out to identify the methodologies available for waste treatment in Textile industry through analysis of the effectiveness of the available methodologies in terms of quality of the wastewater. The industries selected for the study were Hirdaramani, Melbourne Washing Plant, Ocean Lanka and Stretchline Private Limited.

Both Melbourne and Hirdaramani use Pre treatment, Physical and Chemical treatment as well as Biological treatment. Ocean Lanka and Stretchline on the other hand used Pre treatment, Physical and Chemical treatment, but no Biological treatment. Hirdaramani show an overall efficiency of 94% in decreasing BOD (Biochemical Oxygen Demand), COD (Chemical Oxygen Demand as well as TSS (Total Suspended Solid). Melbourne revealed an overall efficiency 95% in same parameters. Ocean Lanka showed an overall efficiency of 64% in decreasing BOD, COD, as well as TSS. Stretchline showed an overall efficiency of 70% in all parameters. Hirdaramani and Melbourne show higher overall efficiencies compare to Ocean Lanka and Stretchline. This is due to the efficiency BOD, COD and TSS through Biological treatment.

Sri Lanka standards set for wastewater release to the inland waters as obtained from the treatment plants are as same as standard set by India, Thailand and Nepal. One of the major current improvements in wastewater treatment in Textile industry is the availability of efficient laboratory facilities, and the reuse of wastewater.