ASSESSMENT ON ENVIRONMENTAL ISSUES RELATED TO WATER POLLUTION

ASSOCIATED IN TEXTILE PROCESSING INDUSTRIES IN DEHIWALA-MT.LAVINIA AND MORATUWA MUNICIPAL COUNCIL AREAS IN SRI LANKA

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ABSTRACT

The textile processing and garment industry is one of the most important industrial sector in Sri Lanka. The study is mainly focused on assessment on environmental issues related in water pollution in sixteen textile processing industries located in Dehiwala – Mt.Lavinia and MoratuwaMunicipal Council areas in Colombo District, Western Province, Sri Lanka and introducing mitigatory measures to control water pollution During the study of 16 industries with different scales (large/medium and small scale industries) identified the exiting pollution control measures compliance to obtain Environmental Protection License.

Out of sixteen industries, adetailed study was carried out in 07 industries including process waste water treatment systems, volume of discharge or consumption of water, mode and quality of treated waste water disposal to the environment with analyzing treated effluent and also carried out in statistical testing ANOVA to the laboratory tested parameters. The 07critical parameters like temperature, colour, pH, BOD, COD, TSSand Oil & grease were measured in five days by hourly 03 samples composite during the period of end of April to July in 2015. (All 07 industry in each day).

According to the results physicochemical treatment combine with biological treatment may show some sort of efficiency rather than physicochemical treatment with sophisticated techniques like electro coagulation with chemical coagulation.

However industries made significant effort to comply tolerance limits of industrial discharges to inland surface waters considering the mode of disposal of cumulative load of treated waste water to the water bodies may result in water pollution as well as soil pollution.