THE EFFECTIVENESS OF REDUCING BIOLOGICAL OXYGEN DEMAND (BOD), CHEMICAL OXYGEN DEMAND (COD), TOTAL SUSPENDED SOLID (TSS) METHODS, USING ROTATING BIOLOGYCAL CONTACTOR (RBC) METHOD IN TOFU LIQUID WASTE

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ABSTRAK

Tofu industry is one of the industries that produces organic waste. Industrial waste obtained can be in the form of solid and liquid waste, but liquid waste is more polluted than solid waste. The purpose of this study was to find out how much effectiveness the Rotating Biological Contactor (RBC) with 2.5 RPM in reducing the levels of Biological Oxygen Demand (BOD), Chemical Oxygen Demand (COD), Total Suspended solid (TSS)" on tofu waste.

This research is a descriptive study using the effluent technique which was carried out during January – May using tofu liquid waste water samples. This study was conducted to determine the effectiveness of reducing BOD, COD, TSS levels using the rotating biologicalcal contactor (RBC) method in tofu liquid waste. With the hope of providing an overview of the reduction in levels of BOD, COD, TSS in tofu waste before and during the processing (6 replicas) using a Rotating Biological Contactor (RBC).

The results of this study showed a decrease in 24 hours with an average and 48 hours processing, but the more effective at 72 hours processing were BOD, COD TSS with an average BOD level of 96.6 mg/l. COD levels with an average of 107 mg/l. TSS levels with an average of 69 mg/l.

From the description above, the overall effectiveness of tofu wastewater treatment using 6 replications with RBC is the most effective at 72 hours processing.

Keywords = Tofu Liquid Waste, Effectiveness, RBC, BOD, COD, TSS