CARWASH WASTEWATER TREATMENT BY USING OIL SEPARATOR REACTOR AND ACTIVATED CARBON

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Carwash industry that increasingly widespread would make the quality of water bodies even worse. Not a bit of carwash industries discharge their wastewater directly into water bodies without going through treatment process. It is necessary to study about using simple technology that could be overcome the problem of carwash wastewater accordingly. One of technology that can be use is utilizing the combination of processes between oil separator reactor and adsorption. Variation used in this research are carwash wastewater concentration and diameter of activated carbon used for adsorption process.

From the results of this whole research, carwash wastewater treatment using oil separator reactor and activated carbon is quite efficient. COD content decreased between range 64,71%-96,20%, while oil content decreased between range 67,35% - 93,10%. Based on the analysis results obtained that activated carbon with 14 MESH of diameter is the most efficient in decreasing levels of COD and oil. Reduction of COD and oil in carwash wastewater between concentration 100% and 50% not showed significat results.

Keywords: oil separator reactor, COD, oil, activated carbon, adsorption.