PENGOLAHAN AIR LIMBAH INDUSTRI MINYAK KELAPA SAWIT DENGAN METODE KOAGULASI, FENTON DAN ADSORPSI

(PALM OIL INDUSTRY WASTE WATER TREATMENT WITH COAGULATION METHOD, FENTON AND ADSORPTION)

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ABSTRACT

Crude palm oil waste water is waste water that resulted from the palm oil industry. If crude palm oil waste water is released to environment, so it can decrease enviromentset quality because it contains pollutant organic compound. In this research waste water crude palm oil processed using alum as coagulant with dosage 5000 ppm. This step process was continued by using the concentration fenton $Fe_2SO_47H_2O$ 0.004 M and concentration H_2O_2 0.32 M. In the final process waste water was treated by adsorpstion active carbon columb of 30 cm, 40 cm and 50 cm and flow rate 80 mL/minute, 110 mL/minute and 140 mL/minute. In flow rate of 80 mL/minute and height activated carbon columb 50 cm the BOD, COD and TSS reduction increased until 70.10 %, 59.37 % and 85.69 % respectively.

Key words : coagulation, fenton, activated carbon.