

STUDY OF MAGETAN WWTP EFFLUENT POLLUTION ON GANDONG RIVER WATER

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ABSTRAK

Wastewater is water that has decreased in quality due to human influence. The quality of effluent wastewater from LIK Magetan effluent on the COD, TSS and Ammonia parameters is above the quality standard according to the East Java Governor Regulation Number 52 of 2014 in addition to that the water quality of the Gandong river is also above the quality standard on the parameters of BOD, COD and TSS according to PP RI Number 22 of 2021. This study aimed to determine the study of the effluent pollution of the LIK water treatment plant Magetan on the Gandong river water.

This type of research is descriptive. The sampling method used is grab sampling. The subject of this research is the waste in the LIK water treatment plant Magetan and the Gandong river water body. The object of this research is the quality of the influent water, the effluent of the LIK water treatment plant Magetan and the water body of the Gandong river. The data were analyzed by calculating the pollutant load and the pollutant index of the effluent and water bodies of the Gandong river. Data was collected by means of surveys, interviews and water sampling.

The results obtained that the quality of the effluent water from the LIK Magetan effluent was above the quality standard on the COD parameter with the results of 253.5 mg/L and TSS 115 mg/L with the hazard category, the water quality of the water body was also above the quality standard at the point before 50 meters of the BOD parameter. 775.5 mg/L, COD 214.5 mg/L, TSS 131.5 mg/L with quality status heavily polluted at the point after 50 meters parameters BOD 104.5 mg/L, COD 273.5 mg/L, TSS 151,5 mg/L, Ammonia 0.35 mg/L with heavily polluted quality status. It is hoped that the surrounding community will not dispose of household waste directly into the Gandong river water body.

Keywords : Pollution, WWTP, River