

**PENENTUAN KELAS AIR, DAYA TAMPUNG BOD,  
DAYA TAMPUNG COD DI SUNGAI GARANG,  
JAWA TENGAH**

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**ABSTRACT**

*The Garang River is one of the rivers in Central Java that passed The Semarang Regency, Semarang City and the Kendal Regency. The Garang River such as BOD and COD disposal burdens that were the indicators of water pollutant dealt the problem of the environment. To learn the BOD and COD capacity in the Garang River, the researcher tried a modeling system. The method is by using Qual2E Software for BOD and mass balance for COD afterwards compared with the standard in accordance with PP no 82 in 2001 about the water quality management and control water pollutant. Besides was carried an identification water grade with a storet method. From the water grade identification, we know that all the segments of the Garang River had the good quality for the fourth grade. The results of BOD simulation are having capacity for more pollutant but not for the fifth segment. The result of COD simulation shown that in the minimum debit along the Garang River had none capacity but there is a little in the maximum capacity for grade III and grade IV.*

*Keywords: Garang River, pollutan capacity, BOD, COD, simulation*