STUDY OF SHALLOW DUE TO CATTLE BREEDING WASTE IN THE SOROGENEN VILLAGE, DISTRICT OF SEWON, BANTUL REGENCY, YOGYAKARTA

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ABSTRACT

This study aims to determine the quality of shallow groundwater use Pollution Index in terms of the parameters Turbidity, pH, BOD, COD, ammonia (NH₃), nitrates and bacteria *E.coli* in the study area.

The method used is a survey method, laboratory analytical methods and method Pollution Index. Distribution map obtained from the groundwater pollution Pollution Index value calculation. Parameters that are used as the depth of groundwater table, topography, media aquifers, groundwater flow.

Based regulation of Yogyakarta Special Region Government Rules Number 20 of 2008 concerning on Water Quality Standard in the Yogyakarta Special Region for Class I drinking water, the content of turbidity at TS 1 to 6 does not exceed the quality standards, the content of pH on TS 1 to TS 6 is not exceeded quality. Parameter BOD at TS 1 to TS 6 exceeds quality standards. The content of COD in TS 1, TS 4, TS 5 exceeded the standard quality. The highest ammonia content of the TS 2 is 0.55 mg / L. Nitrate content of the TS 1 to TS 6 does not exceed the quality standards. *E.coli* bacteria content at TS 1 to TS 6 does not exceed the quality standards. *E.coli* bacteria content at TS 1 to TS 6 does not exceed the quality standards. Distribution of groundwater contamination in the area of research on locations 1 to 6 included into lightly polluted level. Alternative management direction in the area of research that keep cleaning the cage and manufacture of communal waste water treatment plant.

Keyword: Cattle Farm, pollution Index,