Analysis of the Susceptibility level for Groundwater Pollution Caused by Cattle farm
In the Srimulyo Village, District of Piyungan, Bantul Regency,
Yogyakarta Special Region With DRASTIC Method

By

Dwi Kusmayati
114090104

ABSTRACT

This research aims to determine the quality of the groundwater parameters such as pH, BOD, COD, TSS, chrome, ammonia (NH_3), and E.coli, determine the pattern of distribution of groundwater contamination in the research area, and determine alternative of water pollution management.

The method used survey, laboratory analysis, and DRASTIC. Groundwater contamination susceptibility map obtained by the method of weighting drastic. The parameters used as face groundwater depth, the amount of recharge, aquifer media, soil media, topography, vadose zone media influence and hydraulic conductivity.

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. L 3 has the highest TSS content and there is 16.6 mg/L. Number L 1 – L 6 sample is not exceeded the quality standard. L 1 has the highest BOD and there is 3.08 mg/L. L 1 has the highest COD and there is 10.28 mg/L. L 5 has the highest ammonia and there is 0.0626 mg/L. The highest E.coli are the L 1 and L 2 sample, there are ≥2400 MPN/100mL. Sample 6 area included low susceptibility. Sample 1 and sample 3 area included intermediate susceptibility. Sample 2, 4, and 5 area included high susceptibility. Alternative management in this research area is by utilizing waste for biogas and organic pesticides homemade.