THE WASTE WATER CONTAMINATION EVALUATION TOWARDS AGRICULTURE AND RESIDENCE IN FINAL RUBBISH DISPOSAL SITE (TPA) OF BANYUROTO IN BANYUROTO VILLAGE, NANGGULAN DISTRICT, KULONPROGO REGENCY, YOGYAKARTA SPECIAL REGION

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ABSTRACT

Along with population rise and living needs rise so that it would produce a huge disposal material, therefore the building of Rubbish Final Disposal Site (TPA) was needed to rubbish management in an area, however the development also had a negative effect to the nearby site. The effect emerged due to the TPA was soil water quality effect around TPA location. This research was conducted in Final Rubbish Disposal of Banyuroto in Banyuroto village, Nanggulan District, Kulon Progo Regency, Yogyakarta Special Region. The purpose of this research was to know how big waste water effect to oil water quality around TPA of Banyuroto was and to know waste water-free contaminated soil water spread pattern so that it could give information or description on soil water quality condition in the research area.

The research used a *survey and analytical method*. Survey method was conducted by a field direct observation for analysis method namely by analyzing laboratory sample test laboratory and then compared the laboratory test result by quality standard determined.

For soil water quality test, it was conducted soil water sample taking as much as 10 points based on soil water flow direction by a parameter tested namely TDS, pH, BOD, COD, and heavy metal (lead and chrome). Out of laboratory test result, nature value of BOD, COD, and TDS there were some points exceeded quality standard to the maximum value was in point S2 (*outlet*) with each value of BOD=200.1 mg/l; COD=750 mg/l; and TDS=2,640 mg/l. Quality standard still tended to neutral ranged between 6.8–8.2 was still under quality standard. Heavy metal parameter itself was still far under quality standard that was for lead value <0.0093 mg/l and for chrome value <0.0014 mg/l.

Keywords: Evaluation, Waste water, Banyuroto