PENGENDALIAN PENCEMARAN AIR TANAH AKIBAT KEGIATAN RUMAH PEMOTONGAN AYAM DI KALURAHAN MULYODADI, KAPANEWON BAMBANGLIPURO, KABUPATEN BANTUL, DAERAH ISTIMEWA YOGYAKARTA

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INTISARI

Terdapatnya kegiatan industri di Indonesia dapat membantu meningkatkan perekonomian serta kesejahteraan bagi masyarakat Indonesia. Masyarakat Indonesia umumnya mengkonsumsi olahan daging ayam dalam kehidupan sehari-hari sehingga permintaan daging ayam pun tinggi. Kegiatan industri Rumah pemotongan ayam di Indonesia umumnya dilakukan dalam skala kecil hingga besar. Kalurahan Mulyodadi, Kapanewon Bambanglipuro, Kabupaten Bantul, Daerah Istimewa Yogyakarta. Limbah Industri Rumah pemotongan ayam belum diolah dan langsung dibuang ke saluran pembuangan air. Limbah yang dihasilkan memiliki kandungan organik yang tinggi sehingga memiliki potensi penurunan kualitas air tanah. Oleh sebab itu tujuan penelitian ini yaitu mengkaji kualitas air limbah rumah pemotongan ayam, status mutu air tanah, tingkat kerentanan air tanah dan arahan pengelolaan untuk pengendalian pencemaran.

Metode yang digunakan yaitu metode *survey* lapangan dan pemetaan, metode survei dan pemetaan, metode uji laboratorium, metode populasi dan sampling serta metode analisis deskriptif. Pengambilan sampel air limbah dan air tanah menggunakan metode *purposive sampling*. Status mutu air ditentukan dengan metode Indeks Pencemaran. Analisis tingkat kerentanan air tanah menggunakan metode DRASTIC. Metode analisis deskriptif ditujukkan untuk rekomendasi arahan pengelolaan berupa perencanaan pembangunan IPAL.

Hasil penelitian menunjukkan kualitas limbah cair rumah pemotongan ayam yang melebihi baku mutu di parameter BOD yaitu 248,52 mg/L. Status mutu air tanah termasuk kategori tercemar ringan yang memiliki nilai indeks pencemaran 1,4002-2,8432. Tingkat kerentanan air tanah di daerah penelitian terbagi atas 3 klasifikasi yaitu tingkat kerentanan rendah (skor 127), kerentanan sedang (skor 131) dan kerentanan tinggi (skor 155). Rekomendasi arahan pengelolaan di daerah penelitian yaitu pembangunan IPAL Biofilter Anaerob dengan media batuapung. Pemilihan batuapung sebagai media biofilter dikarenakan dapat menurunkan kadar BOD yang tinggi.

Kata kunci: Pencemaran, Kerentanan Air Tanah, Industri Rumah pemotongan ayam, Biofilter Anaerob

CONTROL OF GROUNDWATER POLLUTION DUE TO CHICKEN SLAUGHTERHOUSE ACTIVITIES IN KALURAHAN MULYODADI, KAPANEWON BAMBANGLIPURO, BANTUL REGENCY, YOGYAKARTA SPECIAL REGION

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ABSTRACT

The existence of industrial activities in Indonesia can help improve the economy and health for the people of Indonesia. Indonesians generally consume processed chicken meat in their daily lives so that the demand for chicken meat is high. The industrial activities of Chicken Slaughterhouses in Indonesia are generally carried out on a small to large scale. Kalurahan Mulyodadi, Kapanewon Bambanglipuro, Bantul Regency, Yogyakarta Special Region. The waste of the Chicken Slaughterhouse Industry has not been treated and is directly discharged into the sewerage. The waste produced has a high organic content so that it has the potential to decrease the quality of groundwater. Therefore, the purpose of this study is to examine the quality of wastewater of chicken slaughterhouses, the status of groundwater quality, the level of groundwater vulnerability and management directions for pollution control.

The methods used are field survey and mapping methods, survey and mapping methods, laboratory test methods, population and sampling methods and descriptive analysis methods. Sampling of wastewater and groundwater using the purposive sampling method. Determination of groundwater quality status using the Pollution Index method. Analysis of groundwater susceptibility levels using the DRASTIC method. The descriptive analysis method is intended for recommendations for management directions in the form of WWTP development planning.

The results showed that the quality of liquid waste of chicken baging houses exceeded the quality standards in the BOD parameters, namely 248.52 mg / L. Groundwater quality status is included in the category of mildly polluted, which has a pollution index value of 1.4002-2.8432. The level of groundwater vulnerability in the study area is divided into 3 classifications, namely low vulnerability (score 127), moderate vulnerability (score 131) and high vulnerability (score 155). Recommendations for management directions in the research area are the construction of anaerobic biofilter WWTP with floating stone media. The selection of floating stone as a biofilter medium is because it can reduce high BOD levels.

***Keywords**: Pollution, Groundwater Vulnerability, Chicken Slaughterhouse Industri, Anaerobic Biofilter*