

# POTENSI PENCEMARAN LIMBAH CAIR RUMAH PEMOTONGAN AYAM X DI DUSUN BETAKAN, SUMBERRAHAYU, MOYUDAN, SLEMAN

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## INTISARI

Terdapat produk sampingan dari kegiatan pemotongan ayam yaitu limbah cair yang relatif banyak mengandung bahan pencemar dan didominasi oleh bahan organik dan padatan. Rumah Pemotongan Ayam X belum memiliki pengolahan air limbah dan limbah langsung dibuang ke badan air. Proses produksi rumah pemotongan ayam yang tidak terdapat pengolahan air limbah memiliki potensi bahaya, diantaranya meningkatnya kadar BOD, COD, TSS, dan pH, sehingga berpotensi mencemari lingkungan. Tujuan penelitian ini adalah mengetahui potensi pencemaran limbah cair RPA X di Dusun Betakan, Sumberrahayu, Moyudan, Sleman.

Jenis penelitian ini adalah survei deskriptif. Sampel air limbah diambil menggunakan metode *integrated sampel* kemudian diperiksa kualitasnya di laboratorium. Pemeriksaan yang dilakukan meliputi parameter BOD, COD, TSS, dan pH serta volume air limbah paling banyak.

Hasil penelitian ini didapatkan nilai parameter berurutan dari BOD, COD, TSS, pH, dan volume air limbah paling banyak adalah 1110,34 mg/L; 1726,08 mg/L; 186 mg/L; 7,33; dan 0,0135 m<sup>3</sup>/ekor/hari. Hasil tersebut menunjukkan bahwa parameter BOD dan COD telah melewati baku mutu menurut Perda DIY No. 7 Tahun 2016 tentang Baku Mutu Air Limbah, sedangkan parameter TSS, pH, dan volume air limbah paling banyak tidak melebihi baku mutu.

Kesimpulan dari penelitian ini adalah air limbah RPA X tanggal 08 April 2020 dengan jumlah pemotongan ayam 200 ekor dapat berpotensi mencemari badan air karena kadar BOD dan COD berada di atas baku mutu yang telah ditetapkan. Tingginya kadar BOD dan COD disebabkan tidak adanya sistem pengolahan air limbah pada industri tersebut, sehingga diperlukan pengelolaan air limbah yang efektif agar kualitas limbah cair memenuhi baku mutu.

**Kata kunci :** rumah pemotongan ayam, air limbah, BOD, COD

***POLLUTION POTENTIAL FROM LIQUID WASTE OF CHICKEN  
ABATTOIR “X” AT BETAKAN HAMLET, IN SUMBERRAHAYU,  
MOYUDAN, SLEMAN***

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***ABSTRACT***

*There is a byproduct of chicken abattoir activities, which are relatively large amounts of liquid waste containing pollutants and are dominated by organic matter and solids. Chicken Abattoir “X” does not yet have wastewater treatment and waste is directly discharged into water bodies. Chicken Abattoir production processes that do not have wastewater treatment have potential hazards, including increased levels of BOD, COD, TSS, and pH, thus potentially polluting the environment. The purpose of this study was to determine the potential for Chicken Abattoir “X” liquid waste pollution in the Betakan Hamlet, in Sumberrahayu, Moyudan, Sleman.*

*This type of research is a descriptive survey. Wastewater samples taken using the integrated sample method are then checked for quality in the laboratory. Examinations carried out include the parameters of BOD, COD, TSS, and pH as well as the volume of wastewater at most.*

*The results of this study obtained sequential parameter values of BOD, COD, TSS, pH, and volume of wastewater at most were 1110.34 mg/L; 1726.08 mg/L; 186 mg/L; 7.33; and 0.0135 m<sup>3</sup>/head/day. These results indicate that the BOD and COD parameters have passed the quality standard according to Special Region of Yogyakarta Regulation No. 7 of 2016 concerning Wastewater Quality Standards, while the parameters of TSS, pH, and volume of wastewater at most do not exceed quality standards.*

*This study concludes that the Chicken Abattoir “X” wastewater on April 8, 2020, with a total of 200 chickens slaughtered can potentially pollute water bodies because the BOD and COD levels are above the established quality standard. The high levels of BOD and COD are caused by the absence of a wastewater treatment system in the industry, so an effective wastewater treatment is needed so that the quality of liquid waste meets the quality standards.*

***Keywords:*** chicken abattoir, wastewater, BOD, COD