KAJIAN KEBERADAAN LIMBAH CAIR INDUSTRI TAHU KURING TERHADAP KUALITAS AIR SUNGAI CODE DI BANGUNHARJO, KAPANEWON SEWON, KABUPATEN BANTUL

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ABSTRAK

Latar Belakang : Produsen tahu yang membuang limbah cairnya ke sungai tanpa melalui pengolahan, akan menimbulkan masalah lingkungan berupa pencemaran sungai oleh limbah cair. Peneliti telah melakukan studi pendahuluan terhadap sampel diambil dari *outlet* limbah cair Industri Tahu Kuring pada bulan Agustus 2024. Hasil pengujian menunjukkan bahwa kadar BOD pada limbah 1370 mg/L, kadar COD 6600 mg/L pada limbah cair industri tahu melebihi baku mutu yang telah ditetapkan. Berdasarkan hal tersebut, sehingga perlu dilakukan pemantauan terhadap kualitas limbah cair Industri Tahu Kuring.

Tujuan: Mengetahui kualitas air Sungai Code di Bangunharjo dengan keberadaan limbah cair Industri Tahu Kuring di Bangunharjo, Kapanewon Sewon, Kabupaten Bantul

Metode: Pengambilan sampel air sungai dilakukan secara berkala di tiga titik, serta di titik *outlet* limbah cair industri, dengan pengulangan sebanyak tiga kali pada waktu yang berbeda menggunakan teknik *grab sampling*. Jenis penelitian adalah survey deskriptif kuantitatif dengan pendekatan observasional. Data yang dihasilkan dianalisis secara deskriptif.

Hasil: Hasil Kadar BOD (2228 mg/L), COD (4904 mg/L) dan TSS (484,6 mg/L) limbah cair tahu melebihi standar baku mutu BOD (150 mg/L), COD (300 mg/L), TSS (200 mg/L). Pemeriksaan air sungai sebelum terkena limbah cair tahu memenuhi standar baku mutu dan setelah terkena limbah cair melebihi standar baku mutu. Parameter pemeriksaan paling besar berada di titik II

Kesimpulan: Hasil pemeriksaan limbah cair tahu kuring pada parameter BOD,, COD, dan TSS melebihi standar baku mutu. Pemeriksaan parameter BOD,COD, TSS dan pH air sungai setelah terkena limbah cair tidak memenuhi standar baku mutu.

Kata Kunci: Limbah cair industri tahu, Kualitas air sungai

STUDY ON THE IMPACT OF KURING TOFU INDUSTRY LIQUID WASTE ON THE WATER QUALITY OF CODE RIVER IN BANGUNHARJO, SEWON DISTRICT, BANTUL REGENCY

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ABSTRACT

Background: Tofu producers who discharge their liquid waste directly into rivers without treatment cause environmental problems in the form of river pollution. Researchers conducted a preliminary study on samples taken from the outlet of the Tahu Kuring industrial liquid waste in August 2024. Test results showed that the BOD level in the waste was 1370 mg/L and the COD level was 6600 mg/L, exceeding the established quality standards for industrial tofu liquid waste. Based on this, it is necessary to monitor the quality of liquid waster from the Tahu Kuring Industry

Objective: This study aims to determine the water quality of the Code River in Bangunharjo, considering the presence of liquid waste from the Kuring Tofu Industry in Bangunharjo, Sewon District, Bantul Regency.

Methods: This research was a quantitative descriptive survey with an observational approach. River water samples were collected periodically at three points, as well as at the industrial liquid waste outlet point, with three repetitions at different times using grab sampling technique. The resulting data were analyzed descriptively

Results: The results showed BOD levels of 2228 mg/L, COD of 4904 mg/L, and TSS of 484, mg/L tofu liquid waste exceeds quality standards. Examination of the river water before being exposed to the tofu liquid waste met quality standards. The highest parameter values were found at point II.

Conclusion: The examination results for Tahu Kuring liquid waste showed that the BOD, COD, and TSS parameters exceeded quality standards. Examination of BOD, COD, TSS, and pH parameters in the river water after being exposed to the liquid waste did not meet quality standards.

Keywords: Tofu industrial liquid waste, River water quality