

KAJIAN KERUSAKAN LINGKUNGAN PERAIRAN SUNGAI SAMIN AKIBAT PEMBUANGAN LIMBAH CAIR INDUSTRI ALKOHOL

Kasus : di Kecamatan Polokarto, Kabupaten Sukoharjo Provinsi, Jawa Tengah

INTISARI

Penelitian ini bertujuan untuk (1) mengidentifikasi jenis kerusakan komponen lingkungan di lokasi penelitian; (2) menentukan tingkat kerusakan komponen lingkungan hidup di lokasi penelitian; dan (3) merumuskan strategi pengelolaan lingkungan Sungai Samin.

Penelitian ini menggunakan metode survei, dengan pengambilan sampel secara *purposive sampling*. Objek yang diteliti meliputi kualitas air sungai dan kualitas limbah cair industri alkohol, serta persepsi masyarakat di sekitar Sungai Samin dan peran serta pemerintahan. Parameter kualitas air Sungai Samin yang dikaji dalam penelitian ini yaitu suhu, TSS, pH, BOD₅, dan COD, serta densitas dan indeks diversitas plankton.

Hasil penelitian menunjukkan bahwa aktivitas industri alkohol dan limbah cair yang dihasilkan menyebabkan kerusakan komponen lingkungan hidup. Kerusakan komponen abiotik berupa warna dan bau pada titik sampel 2 didukung dengan nilai BOD dan COD yang melebihi ambang baku mutu, sehingga menyebabkan hilangnya ikan di badan sungai dan turunnya nilai densitas plankton pada titik sampel 2. Untuk komponen sosial, kerusakan yang terjadi yaitu konflik sosial antar warga dengan pengrajin alkohol dan rawan tindakan kriminal. Tingkat kerusakan komponen lingkungan yang terjadi di lokasi penelitian, komponen abiotik, biotik dan sosial menunjukkan kerusakan sedang. Strategi pengelolaan lingkungan dilakukan dengan beberapa pendekatan yaitu pendekatan sosial, teknis, institusi dan regulasi dengan melibatkan masyarakat, pemerintahan dan pengrajin alkohol sehingga didapatkan lingkungan yang lebih baik.

Kata kunci: limbah cair, industri alkohol, kualitas air Sungai Samin, pengelolaan lingkungan

STUDY OF ENVIROMENTAL DAMAGES SAMIN RIVER AFFECT BY DISPOSAL LIQUID WASTE OF ALCOHOL INDUSTRIAL

Case : in Polokarto Sub-district, Sukoharjo Regency, Central Java Province

ABSTRACT

This reseacrh is done with the purpose (1) to identify damage components enviromental in the location reseacrh; (2) to determine levels of destruction caused disposal liquid waste of alcohol industrial in the location reseacrh; and (3) formulated the enviromental management strategy affect by liquid waste of alcohol industry in the location reseacrh.

Determination of sampling point and take water sampel use survey method with purposive sampling. Objects study include the quality of river water and the liquid waste quality of the alcohol industry, as well as the perceptions of local people around the Samin River and the role of government. Parameters of quality Samin River was studied in this research are temperature, TSS, pH, BOD₅, and COD, density and index diversity of plankton.

The results showed that activity of alcohl industry and liquid waste generated caused damage to environmental components. Damage of abiotic component in the form of color and odor at sample point 2 is supported with BOD₅ and COD value exceeding standard quality threshold, causing loss of fish in river body and decrease of plankton density value at sample point 2. For social component, the damage that happened is social conflict between citizens with alcoholic craftsmen and prone to criminal acts. The degree of damage to environmental components occurring in the study sites, abiotic, biotic and social components indicates moderate damage. The environmental management strategy is carried out with several approaches: social, technical, institutional and regulatory approaches involving community, government and alcoholic craftspeople to obtain a better environment.

Keyword: liquid waste, alcohol industry, water quality of Samin River, enviromental management