

## ABSTRACT

### **A STUDY OF ENVIRONMENTAL DAMAGE OF BEDOG RIVER DUE TO DOMESTIC WASTE DISPOSAL AS AN EFFORT TO PRESERVE THE ENVIRONMENT IN THE STREAM BEDOG RIVER IN BANTUL REGENCY, SPECIAL REGION OF YOGYAKARTA**

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This research is located on the Bedog River in the middle to the downstream before entering the Progo River, in Bantul Regency. The purpose of this research is to know the type of environmental damage, to know the level of environmental damage and to determine the environmental management strategy in the waters of Bedog River resulting from domestic household waste. The method used in this research is a field survey method to know the facts and events in the field directly. Sampling is based on the stratified random sample method by observing the level and magnitude of the event to the activity occurring at the research site. Determination of environmental pollution level is analyzed by the method of pollutants index of parameters with parameters such as TSS, TDS, COD, BOD, DO, Ammoniak, phosphate, and Total Coliform.

Based on the results of water quality analysis on the Bedog River shows that of the 6 samples tested, 1 A sample point is heavily polluted, 1 sample of medium polluted point and 4 samples of which were lightly polluted according to Governor Regulation No. 20 year 2008 on Quality standards of water in the province of special region of Yogyakarta on the River class II, with a value of TSS 50 mg/L, TDS 1000 mg/L, BOD 3mg/L. COD 25mg/L, phosphate 0.2 mg/L, ammonia 0.5 mg/L, and a Total Coliform 5000 MPN/100mL. The decrease in water quality marked by settlement activity with the output of liquid waste (detergent, MCK, food and beverage, fertilizer) and solid waste (household waste) so that the water quality of river Bedog decreased. Environmental management strategy with communal IPAL in each region to reduce pollution, because there are still many settlements that dispose of liquid waste and dense to the Bedog River. Open coordination with government and related agencies to conduct control and prevention of environmental pollution in the Bedog River

**Keywords :** Domestic waste, environmental pollution, environmental damage, water quality

**KAJIAN KERUSAKAN LINGKUNGAN PERAIRAN SUNGAI BEDOG AKIBAT  
PEMBUANGAN LIMBAH DOMESTIK SEBAGAI UPAYA PELESTARIAN  
LINGKUNGAN  
PADA PENGAL SUNGAI BEDOG DI KABUPATEN BANTUL, PROVINSI  
DAERAH ISTIMEWA YOGYAKARTA**

Intisari

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Penelitian ini bertempat di penggal Sungai Bedog pada bagian tengah hingga hilir sebelum masuk ke Sungai Progo, di Kabupaten Bantul. Tujuan penelitian ini adalah untuk mengetahui jenis kerusakan lingkungan, mengetahui tingkat kerusakan lingkungan dan menentukan strategi pengelolaan lingkungan di perairan Sungai Bedog. Metode yang digunakan dalam penelitian ini merupakan metode survei lapangan untuk mengetahui fakta-fakta dan kejadian di lapangan secara langsung. Pengambilan sampel didasarkan pada metode *stratified random sample* dengan memperhatikan tingkat dan besaran kejadian hingga aktivitas yang terjadi di lokasi penelitian. Penentuan tingkat pencemaran lingkungan dianalisis dengan metode Indeks Pencemar dari parameter dengan parameter diantaranya TSS, TDS, COD, BOD, DO, Amoniak, Fosfat, dan Total Coliform.

Berdasarkan hasil analisis kualitas air di Sungai Bedog menunjukkan bahwa dari 6 sampel yang diuji, 1 sampel titik tercemar berat, 1 sampel titik tercemar sedang dan 4 sampel diantaranya tercemar ringan sesuai dengan Peraturan Gubernur No.20 Tahun 2008 tentang Baku mutu air di Provinsi Daerah Istimewa Yogyakarta pada sungai kelas II, dengan nilai TSS 50 mg/L, TDS 1000 mg/L, BOD 3mg/L. COD 25mg/L, Fosfat 0,2 mg/L, Amoniak 0,5 mg/L, dan Total Coliform 5000 MPN/100mL. Penurunan kualitas air ditandai oleh aktivitas permukiman dengan *output* hasil Limbah cair (deterjen, MCK, makanan dan minuman, hasil pupuk) dan limbah padat (sampah rumah tangga) sehingga kualitas air Sungai Bedog menurun. Strategi pengelolaan lingkungan dengan IPAL komunal pada setiap wilayah untuk mengurangi pencemaran, karena masih banyak permukiman yang membuang limbah cair maupun padat ke Sungai Bedog. Adanya koordinasi secara terbuka dengan pemerintah dan instansi – instansi terkait untuk melakukan pengendalian dan pencegahan pencemaran lingkungan di Sungai Bedog

**Kata kunci :** *limbah domestik, pencemaran lingkungan, kerusakan lingkungan, kualitas air*