

**KAJIAN PENCEMARAN SUNGAI AKIBAT AIR LIMBAH DOMESTIK
KAWASAN PADAT PENDUDUK YANG SUDAH MENERAPKAN STBM
DI KECAMATAN TALIWANG, KABUPATEN SUMBAWA BARAT,
PROVINSI NUSA TENGGARA BARAT**

INTISARI

Aktivitas manusia dalam pembuangan air limbah yang tidak memahami karakteristik air limbah secara khusus dan kondisi lingkungan sekitar secara umum, dapat menyebabkan pencemaran terhadap air baku atau sungai di lingkungan tersebut. Penelitian ini bertujuan untuk mengidentifikasi aktivitas rumah tangga dan pembuangan limbah cair di Kawasan padat penduduk, mengkaji tingkat pencemaran Sungai Brang Rea pada kawasan padat penduduk akibat limbah cair domestik, dan mengevaluasi program Sanitasi Total Berbasis Masyarakat (STBM) untuk pengelolaan pencemaran lingkungan Sungai Brang Rea akibat limbah cair domestik di Kecamatan Taliwang, Kabupaten Sumbawa Barat. Metode yang digunakan dalam penelitian ini adalah metode wawancara dan kuesioner untuk mendapatkan informasi dari narasumber dan 50 orang responden terkait aktivitas domestik masyarakat, kemudian data tersebut diolah untuk dijadikan acuan pengambilan sampel air sungai di 5 titik sampel berbeda, sampel air yang telah diperoleh kemudian dilakukan pengujian parameter fisik (suhu, TDS, TDS), parameter kimia (BOD, COD, pH, amonia, fosfat, minyak dan lemak. Hasil pengujian tersebut akan dianalisis menggunakan metode skoring untuk mengetahui tingkat kerusakan lingkungan dan menjadi acuan perumusan strategi pengelolaan lingkungan akibat air limbah domestik. Hasil penelitian menunjukkan bahwa terjadi kerusakan lingkungan di Sungai Brang Rea pada kawasan padat penduduk dengan kondisi rusak sedang. Hasil pengujian air sungai menunjukkan beberapa parameter kualitas air sungai yang memiliki nilai hasil uji melebihi baku mutu, yaitu pH, COD, BOD, TSS, Minyak dan Lemak, serta *Total Coliform*. Secara kultural, variasi aktivitas domestik seperti pembuangan air limbah ke sungai, perilaku membuang barang bekas layak pakai, kurangnya pemilahan sampah berpengaruh terhadap akumulasi limbah di badan Sungai Brang Rea dan menyebabkan terjadinya penurunan kualitas air Sungai Brang Rea pada kawasan padat penduduk. Strategi pengelolaan lingkungan yang dapat diterapkan berupa pengoptimalan sistem instalasi pengelolaan air limbah domestik dan tinja (IPALDT), penyuluhan terkait perilaku hidup sehat, membangkitkan semangat gotong royong, memberikan pelatihan daur ulang sampah, dan penerapan program STBM secara terperinci.

Kata kunci: *Air limbah domestik, aktivitas domestik, air sungai, pencemaran, STBM.*

**STUDY OF RIVER POLLUTION CAUSED BY DOMESTIC WASTE WATER
DENSELY POPULATED AREAS THAT HAVE IMPLEMENTED STBM
IN TALIWANG DISTRICT, WEST SUMBAWA REGENCY,
WEST NUSA TENGGARA PROVINCE**

ABSTRACT

Human activities in the disposal of wastewater that do not understand the specific characteristics of wastewater and the surrounding environmental conditions in general can cause contamination of raw water or rivers in that environment. This study aims to identify household activities and liquid waste disposal in densely populated areas, examine the level of pollution of the Brang Rea River in densely populated areas due to domestic liquid waste, and evaluate the Community-Based Total Sanitation program for the management of environmental pollution of the Brang Rea River due to domestic liquid waste. in Taliwang District, West Sumbawa Regency. The methods used in this study were interviews and questionnaires to obtain information from informants and 50 respondents regarding the domestic activities of the community, then the data was processed to be used as a reference for sampling river water at 5 different sample points, the air samples that had been obtained were then carried out. disclosure of physical parameters (temperature, TDS, TDS), chemical parameters (BOD, COD, pH, ammonia, phosphate, oil and fat. The test results will be analyzed using the scoring method to determine the level of environmental damage and become a reference for the formulation of environmental management strategies due to domestic wastewater. The results showed that there was environmental damage on the Brang Rea River in densely populated areas with moderately damaged conditions. The results of river water testing showed several river water quality parameters that had test results exceeding the quality standard, namely pH, COD, BOD, TSS, Oil and Fat, and Total Coliform. Culturally, variations in domestic activities such as disposing of waste water into rivers, the behavior of disposing of used goods suitable for use, the lack of waste segregation affect the accumulation of waste in the body of the Brang Rea River and cause a decrease in the water quality of the Brang Rea River in densely populated areas. Environmental management strategies that can be applied include optimizing the installation system for treating domestic wastewater and feces (IPALDT), counseling related to healthy behavior, arousing the spirit of mutual cooperation, providing waste recycling training, and implementing the STBM program in detail.

Keywords: *Domestic wastewater, domestics activities, river water, pollution, STBM.*