

**MONITORING THE QUALITY OF WATER BODY RECEIVING
VANAME SHRIMP (*Litopenaeus Vannamei*) POND LIQUID WASTE IN
BANARAN, GALUR, KULON PROGO IN 2024**

Alif Norasyikin, Bambang Suwerda, Tri Mulyaningsih
Department Environmental Health Poltekkes Kemenkes Yogyakarta,
Jl. Tata Bumi No.3 Banyuraden, Gamping, Sleman
Email: alifnorasyikin@gmail.com

ABSTRACT

Background: Vaname Shrimp Ponds in Banaran, Galur, Kulon Progo have the potential to have a negative impact on the quality of water bodies. Shrimp Pond The liquid waste is immediately disposed of into the nearest water body. Unmanaged liquid waste has the potential to cause environmental pollution. DIY Province has also regulated waste water quality standards for shrimp cultivation industry activities in DIY Regional Regulation No. 7 of 2016.

Objective: To determine the quality of water bodies receiving liquid waste from Vaname Shrimp (*Litopenaeus vannamei*) ponds in Banaran, Galur, Kulon Progo in 2024.

Method: This type of research uses a descriptive survey method. Research objects include: (1) BOD levels (2) COD levels, (3) TSS levels, and (4) Pollution Index (IP). Data collection was carried out directly in the field. The samples taken were water bodies receiving shrimp pond liquid waste. The sampling method uses the Purposive Sampling method by determining 3 sampling points.

Results: Water bodies receiving shrimp pond liquid waste have the highest BOD levels of 13.4 mg/L, COD levels of 42.1 mg/L, TSS levels of 13.0 mg/L. The average Pollution Index (IP) value is 0.2 in the Good category.

Conclusion: The quality of water bodies receiving Vaname Shrimp (*Litopenaeus vannamei*) pond liquid waste in Banaran, Galur, Kulon Progo in 2024 meets the quality standards set based on DIY Regional Regulation No. 7 of 2016 concerning Waste Water Quality Standards. The pollution index (IP) value is in the Good category based on Minister of Environment Decree No. 115/2003 concerning Determining Water Quality Status.

Keywords: Vannamei Shrimp Pond, Banaran, Pollution Index

**PEMANTAUAN KUALITAS BADAN AIR PENERIMA LIMBAH CAIR
TAMBAK UDANG VANAME (*Litopenaeus Vannamei*) DI BANARAN,
GALUR, KULON PROGO TAHUN 2024**

Alif Norasyikin, Bambang Suwerda, Tri Mulyaningsih
Jurusan Kesehatan Lingkungan Poltekkes Kemenkes Yogyakarta,
Jl. Tata Bumi No.3 Banyuraden, Gamping, Sleman
Email : alifnorasyikin@gmail.com

INTISARI

Latar Belakang: Tambak Udang Vaname di Banaran, Galur, Kulon Progo berpotensi menyebabkan pengaruh buruk terhadap kualitas badan air. Tambak Udang X merupakan Tambak Udang Vaname yang berada di Banaran, Galur, Kulon Progo belum melakukan pengelolaan terhadap limbah cair yang dihasilkan. Limbah cair tersebut langsung dibuang ke badan air terdekat. Limbah cair yang tidak dikelola akan berpotensi mengakibatkan pencemaran bagi lingkungan. Provinsi DIY juga telah mengatur tentang baku mutu air limbah untuk kegiatan industri budidaya udang dalam Perda DIY No.7 Tahun 2016.

Tujuan: Mengetahui kualitas badan air penerima limbah cair Tambak Udang Vaname (*Litopenaeus vannamei*) di Banaran, Galur, Kulon Progo Tahun 2024.

Metode: Jenis penelitian menggunakan metode survei deskriptif. Obyek penelitian meliputi: (1) Kadar BOD (2) Kadar COD, (3) Kadar TSS, dan (4) Indeks Pencemaran (IP). Pengumpulan data dilakukan secara langsung di lapangan. Sampel yang diambil berupa badan air penerima limbah cair tambak udang. Metode sampling menggunakan metode Purposive Sampling dengan menetapkan 3 titik pengambilan sampel.

Hasil: Badan air penerima limbah cair tambak udang memiliki nilai kadar BOD tertinggi sebesar 13,4 mg/L, kadar COD sebesar 42,1 mg/L, kadar TSS sebesar 13,0 mg/L. Rata-rata nilai Indeks Pencemaran (IP) sebesar 0,2 dalam kategori Baik.

Kesimpulan: Kualitas badan air penerima limbah cair Tambak Udang Vaname (*Litopenaeus vannamei*) di Banaran, Galur, Kulon Progo Tahun 2024 memenuhi baku mutu yang ditetapkan berdasarkan Perda DIY No. 7 Tahun 2016 tentang Baku Mutu Air Limbah. Nilai Indeks pencemaran (IP) dalam kategori Baik berdasarkan Kepmen LH No. 115/2003 tentang Penentuan Status Mutu Air.

Kata Kunci: Tambak Udang Vanamei, Banaran, Indeks Pencemaran