Intisari

ANALISIS TINGKAT PENCEMARAN AIR SUNGAI LANTAI KABUPATEN BANGKA TENGAH PERIODE SEPTEMBER-OKTOBER 2024 BERDASARKAN STATUS MUTU AIR

Sungai Lantai merupakan sungai yang terdapat di Pulau Bangka dan melintasi dua wilayah, yaitu Kabupaten Bangka Tengah dan Kota Pangkalpinang. Keberadaan Sungai Lantai memiliki peranan besar dalam memenuhi kebutuhan masyarakat, diantaranya menjadi sumber air minum, kebutuhan rumah tangga, budidaya ikan air tawar, pertanian, dan peternakan. Rendahnya kesadaran akan pentingnya menjaga lingkungan, serta masifnya aktivitas yang dilakukan masyarakat berdampak pada kualitas perairan Sungai Lantai. Penelitian yang dilaksanakan pada bulan September-Oktober 2024 pada 5 stasiun bertujuan untuk mengetahui tingkat pencemaran air pada Sungai Lantai berdasarkan status mutu air dengan menguji parameter kualitas air. Parameter kualitas air yang diuji terdiri atas parameter fisika, kimia, dan biologi. Parameter fisika melingkupi suhu air, *Total Suspended Solid* (TSS), warna, dan bau. Parameter kimia yang diuji meliputi pH, *Dissolved Oxygen* (DO), fosfat, nitrat, amonia, dan *Chemical Oxygen Demand* (COD). Parameter biologi yang diambil mencakup bakteri *fecal coliform.* Hasil penelitian menunjukkan data kualitas air berupa suhu air 29-32°C; TSS 2,5-21 mg/L; DO 2,1-3,8 mg/L; pH 6,86-9,34; fosfat 0,03-0,25 mg/L; nitrat 2-25 mg/L; amonia 0,25-0,5 mg/L; COD 12,6-30,6 mg/L; *fecal coliform* 7,80-2400 MPN/100mL. Penentuan status mutu air dilakukan dengan menerapkan metode STORET (*Storage and Retrieval*) menghasilkan skor pada kisaran (-32) hingga (-44), sehingga termasuk dalam kategori kelas D, yang berarti Sungai Lantai, Kabupaten Bangka Tengah berada dalam kondisi cemar berat.

Kata kunci: kualitas air, parameter, sungai, STORET, tercemar

Abstract

ANALYSIS OF WATER POLLUTION LEVEL OF LANTAI RIVER, CENTRAL BANGKA REGENCY FOR THE PERIOD SEPTEMBER-OKTOBER 2024 BASED ON WATER QUALITY STATUS

Lantai River is located on Bangka Island and crosses two regions, namely Central Bangka Regency and Pangkalpinang City. The existence of the Lantai River has a major role in meeting the community's needs, including being a source of drinking water, household needs, freshwater fish aquaculture, agriculture, and animal husbandry. The low awareness of the importance of protecting the environment, as well as the massive activities carried out by the community, impact the quality of the Lantai River waters. The research conducted in September-October 2024 at 5 observation stations aims to determine the level of water pollution in Lantai River based on water quality status by testing water quality parameters. The water quality parameters examined were physical, chemical, and biological parameters. Physical parameters include water temperature, Total Suspended Solid (TSS), color, and odor. Chemical parameters tested include pH, Dissolved Oxygen (DO), phosphate, nitrate, ammonia, and Chemical Oxygen Demand (COD). Biological parameters include fecal coliform bacteria content. The results showed the water quality data in the form of water temperature 29-32°C; TSS 2.5-21 mg/L; DO 2.1-3.8 mg/L; pH 6.86-9.34; phosphate 0.03-0.25 mg/L; nitrate 2-25 mg/L; ammonia 0.25-0.5 mg/L; COD 12.6-30.6 mg/L; fecal coliform 7.80-2400 MPN/100mL. Determination of water quality status was carried out by applying the STORET (Storage and Retrieval) method and produced a score in the range of (-32) to (-44) so it is included in the class D category, namely the Lantai River, Central Bangka Regency is in a severely polluted condition.
Keywords: parameter, polluted, river, STORET, water quality