

**POLITEKNIK KESEHATAN TANJUNG KARANG JURUSAN
KESEHATAN LINGKUNGAN PROGRAM STUDI SANITASI DIII**

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Uji Efektivitas Kualitas Bak Klorinasi Instalasi Pengolahan Air Limbah (IPAL)
Klinik Pratama Griya Subing Medical Dalam Menurunkan Angka Coliform.

xvi + 91 halaman + 3 gambar + 11 tabel + 7 lampiran

RINGKASAN

Bak klorinasi adalah bak pembubuhan kaporit direncanakan dengan alat dosing pump/infuse chlorinator, dimana larutan klorin pada konsentrasi yang terukur dialirkan ke dalam air limpasan IPAL melalui saluran selang yang dilengkapi pengatur aliran/kran. Chlor bebas Klorin, khlorin atau chlorine merupakan bahan utama yang digunakan dalam proses klorinasi. Klorinasi adalah proses utama dalam proses penghilangan kuman penyakit.

Tujuan penelitian Mengetahui efektivitas penurunan bakteri *coliform* dengan mengumpulkan data dengan melakukan uji dosis kaporit dengan sampel air limbah Klinik Pratama Griya Subing Medical. Peneliiian ini bersifat deskriptif, dengan menguji sampel air limbah IPAL di Dinas Lingkungan Hidup UPTD Laboratorium Lingkungan kecamatan Teluk Betung Selatan Bandar Lampung.

Berdasarkan penelitian yang telah dilakukan didapati hasil Kandungan bahan organik pada sampel air limbah di Klinik Pratam Griya Subing Medical adalah 6 mg/L. Nilai BPC pada pembubuhan klor aktif berdasarkan konsentrasi bahan organik tersebut adalah 14 ppm. Pembubuhan klor pada titik BPC 14 ppm menghasilkan rata rata residu klor 9 ppm. Rerata residu klor tersebut mampu menurunkan bakteri Coliform hingga 100% yaitu dari 2700 jml/ 100ml sampel menjadi 300 jml/100ml sampel. Jadi dibutuhkan 43,96 gram kaporit perhari atau setara dengan 4,5 sendok makan kaporit perhari (1 sendok makan = 10 gram).

Kata Kunci : Klorinasi, Bakteri Coliform

Daftar Bacaan : (1999- 2020)

**HEALTH POLYTECHNIC OF KEMENKES TANJUNG KARANG
ENVIRONMENTAL HEALTH DEPARTMENT**

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Helen Novita

Testing The Effectiveness Quality Of Chlorination Bank In Wastewater Treatment Installations (WWTP) Pratama Griya Subinv Medical Clinic In Reducing Coliform Number.

xvi + 91 pages + 3 pictures + 11 tables + 7 attachments

ABSTRACT

A chlorination bath is a chlorine affixing bath designed with a dosing pump/infusion chlorinator, where a chlorine solution at a measured concentration is flowed into the WWTP runoff water through a hose line equipped with a flow regulator/faucet. Chlorine-free Chlorine, chlorine or chlorine is the main ingredient used in the chlorination process. Chlorination is the main process in the process of eliminating germs.

The purpose of the study was to determine the effectiveness of reducing coliform bacteria by collecting data by conducting a chlorine dose test with a sample of wastewater from the Pratama Griya Subing Medical Clinic. This research is descriptive in nature, by testing samples of wastewater from the WWTP at the Environmental Service Office of the Environmental Laboratory UPTD, Teluk Betung Selatan sub-district, Bandar Lampung.

Based on the research that has been done, it was found that the organic matter content in wastewater samples at the Pratam Griya Subing Medical Clinic was 6 mg/L. The value of BPC on the affixing of active chlorine based on the concentration of the organic matter is 14 ppm. The addition of chlorine at the BPC point of 14 ppm resulted in an average residual chlorine of 9 ppm. The average residual chlorine was able to reduce Coliform bacteria up to 100%, namely from 2700 jml/100ml sample to 300 jml/100ml sample. So it takes 43.96 grams of chlorine per day or the equivalent of 4.5 tablespoons of chlorine per day (1 tablespoon = 10 grams).

Keyword : Chlorination, Coliform Bacteria

Reading List : (1999-2020)