

EVALUASI SISTEM PENGOLAHAN AIR LIMBAH INDUSTRI PT BINTANG TOEDJOE PLANT PULOMAS

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Abstract

Waste water is come from discharged of residual water which comes from households, industry, or any other public places, and it generally contain materials or substances that can be harmful for human health and as well as disrupt the environment. Soft drink industry has it own waste water treatment in accordance to characteristics of the wastewater generated. PT Bintang Toedjoe Plant Pulomas have wastewater treatment installations with processing in physics, chemistry, and biology. Wastewater treatment system in PT Bintang Toedjoe Pulomas plant has been built since 2002, as time went on, in 2008 WWTP already has processing such as equalization, anaerobic, aeration, coagulation, sedimentation and filtration. The end or final result of waste water treatment was meet the Quality Standard of waste water according to Peraturan Gubernur DKI Jakarta Nomor 69 Tahun 2013 about Baku Mutu Air Limbah Bagi Kegiatan dana atau Usaha. Evaluation from each processing units of waste water treatment based on design criteria obtained that PT Bintang Toedjoe Pulomas installation water treatment has a retention time which exceeds the criteria of design each of the units, this is due because the dimensions of the large-capacity processing tubs.

Keywords : *Industrial waste water, design criteria, evaluation*

Abstrak

Air limbah atau air buangan adalah sisa air yang dibuang yang berasal dari rumah tangga, industri maupun tempat-tempat umum lainnya, dan pada umumnya mengandung bahan-bahan atau zat-zat yang dapat membahayakan bagi kesehatan manusia serta mengganggu lingkungan hidup. Industri minuman ringan mempunyai kriteria pengolahan limbah tersendiri sesuai dengan karakteristik air limbah yang dihasilkan. PT Bintang Toedjoe Plant Pulomas memiliki Instalasi Pengolahan Air limbah dengan proses pengolahan secara Fisika, Kimia, dan Biologi. Sistem pengolahan limbah di PT Bintang Toedjoe Plant Pulomas sudah dibangun sejak tahun 2002, seiring berjalannya waktu pada tahun 2008 WWTP sudah memiliki proses pengolahan seperti *equalisasi, anaerob, aerasi, koagulasi, sedimentasi dan filtrasi*. Hasil akhir dari pengolahan limbah sudah memenuhi Baku Mutu Peraturan Gubernur DKI Jakarta Nomor 69 Tahun 2013 tentang Baku Mutu Air Limbah Bagi Kegiatan dan/ Usaha. Evaluasi dari masing-masing unit pengolahan berdasarkan kriteria design diperoleh bahwa Instalasi pengolahan air limbah di PT Bintang Toedjoe Plant Pulomas memiliki waktu tinggal yang melebihi kriteria design masing-masing unit, hal ini dikarenakan dimensi bak pengolahan yang berkapasitas besar.

Kata Kunci : Limbah Industri, kriteria *design*, evaluasi