ABSTRAK

Nama : Marlean Dian
Program Studi : Teknik Elektro S1
Judul : Monitoring Kadar PH pada Sistem Waste Water Treatment berbasis Arduino

Skripsi ini membahas cara mengolah limbah industri (IPAL) sebelum di buang ke aliran sungai dengan menggunakan Arduino ATmega 2560 dan adanya campuran bahan kimia Alkali, Ferric Chloride dan Accu Zuur. Proses pengolahan mencakup 3 proses yaitu: Flokulasi – Koagulasi – Netralisasi serta studi lapangan dan pengambilan data Instalasi Pengolahan Air Limbah (IPAL) di PT. Sarandi Karya Nugraha. Proses pembuatan *prototype waste water treatment* ini menggunakan sensor HC-SR04 dan sensor *probe* pH meter untuk mengetahui kategori air limbah yang sudah diolah termasuk asam, netral atau basa.

Kata kunci:
Instalasi Pengolahan Air Limbah (IPAL), IPAL dengan bahan kimia, IPAL berbasis Arduino

ABSTRACT

Name : Marlean Dian

Study Program : Electrical Engineering

Title : *Monitoring PH Value on Waste Water Treatment system based on Arduino*

This final assignment discusses how to process industrial waste (WWTP) before being discharged into the flow of the river using the Arduino ATmega 2560 and the presence of a mixture of Alkaline chemicals, Ferric Chloride and ACCU Zuur. The processing includes 3 processes: Flocculation – Coagulation – Neutralization as well as field study and the retrieval of Waste Water Treatment Plant (WWTP) in PT. Sorandi Karya Nugraha. The process of creating a prototype waste water treatment using HC-SR04 sensors and pH meter probe sensors to determine the category of processed wastewater including acids, neutral or alkaline.

Keywords:

Waste Water Treatment Plant (WWTP), WWTP with chemicals, Arduino-based WWTP