December 2009



Green method for the treating of waste water from service station

S.K Ganegamage and V. P. Bulugahapitiya

Department of Chemistry, Faculty of Science, University of Ruhuna, Matara

Newly established method for the treatment of waste water from the service station is presented. The effluent from the service station was first passed through the sedimentation tank to deposit mud and solid material and followed by the skimming tank to separate the oil. This oil was collected in separate oil collecting tank. After oil was separated, the water was passed through the sand and charcoal containing tank for further filtration. Filtered water was then transferred to the electrolysis tank under aeration to deposit any metals there in.

The water was analyzed before and after the treatment using many physiochemical parameters including, temperature, pH, total alkalinity, conductivity, total suspended material, total dissolved solid, oil and greeze content, dissolved oxygen, biological oxygen demand and chemical oxygen demand.

This method cleans the waste water from the service station significantly. This is a low cost, environmentally friendly method and can be applied in service station

Keywords: water treatment, effluent

Faculty of Science, University of Ruhuna

14