

Performance Evaluation of Waste Water Treatment Plant: an analysis of FOG removal efficiency

Gowthaman, S., Mafizur, R., and Sivakumar, S.S.,

Abstract — The present study has been under taken to evaluate the efficiency of a waste water treatment plant. In this case study, a small scale waste water treatment plant that used to treat the waste water from vehicle service station has been considered. The primary function of the waste water treatment plant is to treat the fat, oil and grease (FOG) and the system described in this study enables operators to meet the treatment goals and guarantees that the quality of the discharge in the receiving environment is compatible with standard regulatory requirements. Waste water samples were collected at different times of disposal and analysed for the major water quality parameters, such as Fats, oil and grease (FOG), biological oxygen demand (BOD), pH, turbidity and dissolved oxygen (DO). Overall performance of the treatment plant has been estimated. The obtained results were very much useful in identification of present status of treatment quality and rectification of operational and maintenance problems as well as the future expansion to be carried out in the plant to meet the increased loadings.