



HOUSEHOLD WASTEWATER TREATMENT FACILITY APPRAISAL - CASE STUDY OF OTA ESTATE, IN OGUN STATE NIGERIA

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ABSTRACT

This paper appraise the biological treatment of household wastewater generated at Ota estate in Ogun state, Nigeria. Actuated sludge technique was used as example of the biological treatment method, while wastewater from the estate septic tank, actuated sludge treatment plant cured water from the expulsion was obtained and laboratory investigation were carried out so as to determine the amount of calcium oxygen demand (COD), Biological Oxygen demand (BOD), Total dissolved solid (TDS), Ammonia (NH₃), Chlorine, Sulphate, Salinity, PH and temperature of the wastewater besides the treated water. Conversely chromium and lead tally with Federal Ministry of Environment (FME) Standard. Household wastewater treatment plant of five hundred cubic meters per day per capacity (500m³/day/cap) has effectual treatment capability and every parameter treated met FME standard. This study impact is about the actuated sludge wastewater treatment plant that can be economically positioned in regions wherever there is adequate electricity supply electricity besides semi-expert workers.

Keywords: Household, Treatment Facility, Actuated Sludge, Wastewater.
