STUDY ON USE OF MODIFIED HIGH EFFICIENCY ATTACHED GROWTH FIXED BED BIOREACTOR PROCESSES FOR EDUCATIONAL INSTITUTE

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Abstract –

The goal of decentralized treatment systems is to reduce large sewage flows to the centralized facilities and can eliminate or reduce disposal cost to receiving water bodies. This study describes the modified high efficiency attached growth fixed bed bioreactor process and presents application of waste water generated from educational institute. The optimum hydraulic retention time of the system was 3 hour and average reduction of 79.99% COD, 89.5 BOD were achieved. The modified attached growth fixed bed bioreactor is capable of removing organic matter from educational institute waste water and provides robust, efficient and cost-effective method.

Keywords – Decentralized waste water, Educational waste water, Removal of COD, Attached growth, optimum Hydraulic retention time