

Chawwalit In-on 2006: Study of SBR Process Commissioning for Bangkok Wastewater Treatment Plant Stage 4. Master of Engineering (Environmental Engineering), Major Field: Environmental Engineering, Department of Environmental Engineering. Thesis Advisor: Mr. Mongkol Damrongsri, Dr.Ing. 177 pages. ISBN 974-16-2477-8

The research study of commissioning test for Bangkok Wastewater Treatment Plant (Jatujack water Environment control Plant) Between April 2005 to February 2006. Was preformed with SBR-CASSTM. The organic carbon in wastewater was low concentration, However the high quantity affected the quality of receiving stream and environment. The influent average flow were 119,614 m³/d from combine sewage collection system incoming to SBR treatment. the characteristic of influent wastewater for BOD, COD, SS, NH₃-N, TN, and TP were average 32.56, 87.17, 56.32, 10.63, 16.08 and 1.63 mg/l respectively the result operation of SBR process CASSTM were 4 hr./cycle or 6 cycle/day that 2 hour filled wastewater and aerated, 1 hour filled wastewater and settle and 1 hour decanted.

The study of effluent wastewater quality showed the result of parameters as BOD, COD, SS, NH₃-N, TN and TP were average 7.63, 35.39, 9.53, 2.81, 11.08 and 1.20 mg/l respectively. the efficiencies of the removal parameters as BOD, COD, SS, NH₃-N, TN and TP were as 75.97%, 58.77%, 82.58%, 73.37%, 30.06% and 26.75% respectively. The research study of SBR-CASSTM was indicated that the process were capable of alterative of nitrogen removal and sludge bulking protection duing the commissioning test.

Student's signature

Thesis Advisor's signature

____/____/____