

**PENGARUH WAKTU STABILISASI
PADA SEQUENCING BATCH REACTOR (SBR) AEROB TERHADAP
PENURUNAN COD DAN TSS
AIR LIMBAH PT. DUA KELINCI**

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Abstract

One of biological wastewater treatment process modification Sequencing Batch Reactor by exploiting period of stabilization time earn to lessen capacities of total aeration volume. Mechanism that happened in this SBR modification same as that happened in Contact Stabilization. There was existence process biosorption, was due to adsorption of the organic matter onto sludge particles, during the contact period (fill - react time). This research aim to know influence of stabilization time to degradation of COD and TSS. This research, used lab scale SBR aerob system units reactor with volume operate for 5 Liters with wastewater from PT. Dua Kelinci. The variation of stabilization time : 5, 6, and 7 hours with 1 hour for react, 1 hour for settle, 15 minutes for draw and 30 minutes for fill. This research used two type of wastewater, wastewater with coagulation – flocculation and wastewater without coagulation - flocculation. The result for this research showed the progressively time of stabilization had influence in removal concentration of COD and TSS. The analyses revealed that happened in degradation of concentration COD and TSS will achieve maximum level at 7 hours stabilization in wastewater with coagulation - flocculation. Efficiency of optimum of COD removal is 78,75% and TSS removal is 65 %.

Keyword : SBR Aerob, stabilization time, COD, TSS