

Batch anaerobic treatment of fresh leachate from transfer station

ABSTRACT

Leachate from transfer station requires treatment before being discharged into the environment to avoid surface and underground water contamination. Various factors such as waste composition, availability of oxygen and moisture, designing and controlling of transfer station operations have been shown to affect the composition of the leachate. The high COD, BOD, ammonia nitrogen (NH₃-N) and heavy metals contents of fresh leachate are the main problems faced by leachate treatment operators. The result of the present study indicated that this process reduced the COD content by 43%. The average removal efficiencies of BOD₅, TS, TSS, and VSS were 80, 49, 37 and 39 %, respectively.

Keyword: Biological treatment; Leachate treatment; Anaerobic process; COD removal