

عنوان مقاله:

Performance Evaluation of Hybrid Septic Tank and Aerated Lagoon Process Efficiency for Landfill Leachate Treatment

محل انتشار:

مجله علمی پژوهشی دانشگاه علوم پزشکی زنجان، دوره 19، شماره 74 (سال: 1389)

تعداد صفحات اصل مقاله: 13

نویسندگان:

میترا غلامی - *Dept. of Environmental Health Engineering, School of Public Health, Tehran University of Medical Sciences, Tehran, Iran*

رویا میرزایی - *Dept. of Environmental Health Engineering, School of Public Health, Tehran University of Medical Sciences, Tehran, Iran*

حامد محمدی - *Health Faculty, Zanzan University of Medical Sciences, Zanzan, Iran*

خلاصه مقاله:

Background and Objective: In this research, landfill leachate treatment in Karaj city was investigated by a linked septic tank and aerated lagoon. Materials and Methods: At first, characteristics of the leachate were determined. Then a pilot plant with anaerobic-aerobic (Septic tank and Aerated lagoon) parts was installed and started. Results: Results showed that Chemical Oxygen Demand (COD) removal efficiency for septic tank and subsequently to lagoon for influent COD of ۱۹۵۳۷ mg/L, were ۸۴۰۱ and ۴۳۲ mg/L, respectively. The septic tank and aerated lagoon also operated with different flow rates and the best results for septic tank and aerated lagoon obtained in ۲۳.۶ L/day and ۹.۳ L/day respectively with maximum COD removal efficiency of ۹۱.۲%. Conclusion: According to the obtained results, the hybrid system had ۹۰% COD removal efficiency. Therefore, leachate COD loading could be effectively removed in this system.

کلمات کلیدی:

Leachate, Landfill, Aerobic-Anaerobic Treatment, Chemical Oxygen Demand

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1191309>

