

## عنوان مقاله:

Efficiency of a natural wetland for effluent polishing of a septic tank

## محل انتشار:

فصلنامه بهداشت، ایمنی و محیط زیست، دوره 1، شماره 2 (سال: 1392)

تعداد صفحات اصل مقاله: 7

## نویسندگان:

Z Yousefi - *Department of Environmental Engineering, Mzandaran University of medical sciences, Sari, Islamic Republic of Iran*

S Jowhari - *Health Faculty, Mzandaran University of medical sciences, Sari, Islamic Republic of Iran*

.Sh Nasiri - *Health Faculty, Mzandaran University of medical sciences, Sari, Islamic Republic of Iran*

## خلاصه مقاله:

Wetlands now days apply as a polishing system for the classical wastewater treatment, in addition of different usages. Usually wetland systems are inexpensive methods vs. expensive high technology treatment systems. Objective of this study is an evaluation of natural wetland treatment in polishing of a septic effluent. Research duration works extended for 10 months on a natural wetland system in Pardis of Mazandaran University of medical sciences and eastern north of health faculty. Wastewater quality index such as pH, EC, BOD, COD, TSS, Nitrate, Phosphorus, Ammonia and Temperature performed on the samples of influent and effluent of the system. The study showed the system works as a buffering system for flow and pH. Results indicated that average of BOD5 and TSS efficiency were 67.70 and 83%, respectively. Efficiency of COD was 65.26 and 80 % for a Low and moderate strength influent respectively. Average of phosphorus, NH3 and Nitrate in effluent were 0.032 mg/L, 7.18 and 0.036 mg/L, respectively. Efficiency of ammonia and Phosphorus were slightly increased in best condition. Based on this study result, natural wetland can be success in BOD, COD, and TSS removal of the classical septic tank, but for nitrogen and Phosphorus removal do not have considerable effects

## کلمات کلیدی:

Natural wetland; septic tank effluent; efficiency

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/326982>

