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Evaluation of raw and treated wastewater of north Isfahan wastewater plant for agriculture usage

A. Eigder^{1•} and M. Motzadeh ¹
1. M.Sc. of Islamic Azad University

Collection, filtering and further utilization of sewages in agriculture is one of the useful methods for maximum use of water resources and devaluation of chemical fertilizers. For further utilization of sewage in agriculture, standards and specific criteria have been provided. In this study qualitative properties of north Isfahan raw and treated sewage were evaluated according to the standards of Iran (1373) and the guidelines for irrigation water quality by Ayers and wastewater, for 6 months. The results suggest that some parameters such as BOD, COD, TSS and turbidity of raw sewage have exceeded the set limitations but the parameters COD and TSS have exceeded the limits in treated sewage. pH was standard in two treatments. According to the guidelines for irrigation water quality by Ayers and Westeot (1985) the two treatments considering soil penetration had no effect but considering the salinity had mediocre effect. In terms of bicarbonate the raw sewage had greater influence than treated sewage.

Keywords: Wastewater application in agriculture, Raw and treated wastewater, Filtration, North Isfahan wastewater plant

* Corresponding author

Email: a_eigder@yahoo.com