

Infiltration of wastewater

An applied study on treatment of wastewater by soil infiltration

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Abstract:

A comprehensive survey of the literature is presented trying to cover the knowledge of most infiltration processes on to 1985.

The different studies have looked into the problems of subsurface as well as open pond infiltration systems. Both column tests and full-scale investigations are carried out and the results from the column and laboratory tests are compared to those from the full-scale sites. Finally the whole process of implementing an on site system is studied.

Among the subjects studied are BOD-removal, N-transformation and removal, hydraulic capacity, P-sorption, preapplication treatment, specific water consumption and pollutants and the implementation process.

Numbers and suggestions are presented on possible loading rates, removal efficiencies and factors affecting the process. The complex P-sorption is discussed more in detail. Finally a "software model" for the implementation process is presented.

The overall conclusion is that a natural soil is a very effective and economic media for treating domestic wastewater.