

Reedbeds for treating tannery effluent

Richard Daniels

"Green Croft", Moulton Lane, Boughton, Northampton, NN2 8RF

Tel: +44 (0) 1604 843260, Mob: +44 (0) 7717352735, Email: r.daniels@greentech.plus.com

Abstract: Engineered reedbeds offer a low cost and efficient way of treating tannery effluents. This is a biological process and offers two forms of treatment:

- an alternative to the activated sludge treatment system for treating tannery effluents.
- a method to provide tertiary treatment to effluents that have already undergone conventional treatment, but where further improvement is needed.

The technique comprises the flow of effluent through the root structure of reeds in simple engineered configurations, where the micro-organisms held within the root structure break down the biodegradable effluent components. The system is very low in capital and running costs, is easy to manage, and produces no solids for disposal.

The performance of reedbeds has been carefully evaluated on many different tannery effluents. Reedbeds have been set up on pilot/demonstrated scale in India, Central America, Europe, and is undergoing evaluation in other countries. The technology can be easily assessed on pilot scale before any major commitment by an organisation.

Reedbed applications were presented in detail as the ALCA Wilson Memorial Lecture 2007 Washington, held in conjunction with IULTCS Congress 2007. Other presentations have been given in India, and South Africa.