

REFERÊNCIA

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## Application of experimental constructed wetlands to the waste-water treatment in a leather company

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Effluents derived from the leather industry have a high organic load, and often contain chromium in varying concentrations. The performance of 7 horizontal subsurface flow wetlands containing different vegetation and filter media to treat a tannery effluent was evaluated during 7 months.

The pilot constructed wetlands were designed based on recommendations made by the EPA-Environmental Protection Agency and by other authors. The constructed wetlands treatment technology is based on natural geochemical and biological processes, in order to accumulate and remove metals, and degrade other contaminants from influent waters. The relationship between the growth of the plants, the media, and the removal efficiency of five-day biochemical oxygen demand (BOD<sub>5</sub>), chemical oxygen demand (COD), total chromium and total phosphorous was analysed.

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