

Biofilter with granulated activated carbon for resource efficient removal of micropollutants

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Abstract: Biofilter with granulated activated carbon (GAC) as filter material have not received the same attention as resource efficient removal alternative for micropollutants as other technologies. The combination of adsorption and biological degradation, however, is far more powerful and has a much larger potential than the commonly considered ozonation. GAC-biofilter not only can remove a broader range of micropollutants than ozonation, they do further not impose any risk of the formation of toxic residues and have a greater improvement potential regarding environmental sustainability and costs. The paper presents results from several long-term tests in Sweden including removal efficiencies, environmental performance and cost of GAC-biofilter.

Keywords: biofilter; micropollutants, wastewater treatment