

Pesticide removal in rapid sand filters in waterworks



The aim of the project is to investigate the removal of pesticides in rapid sand filters at Danish waterworks. Pesticides and metabolites are detected in 24% of the active waterworks abstraction wells in Denmark, where the water treatment is simple consisting of aeration of anaerobic groundwater followed by filtration in rapid sand filters. Due to the sustainability of rapid sand filters it is of great interest to utilise these to remove pesticides. Previous investigations have shown that there is a potential for rapid, biological removal of pesticides in filter sand from rapid sand filters. The purpose of this project is to do a further investigation of this pesticide removal. This could be to e.g. investigate sorption or microbial degradation behaviour of different pesticides, investigate whether backwash influences the removal, or whether removal already occurs in existing waterworks by searching databases.

Project type

Topic is suitable for BSc project, MSc project or specialized course

Pre-requisite

12121 Water Supply or similar

Group size

1-2 students

Department of supervisors

Main supervisor: DTU Environment

Co-supervisor: DTU Environment

Contact person

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