Drink. Water Eng. Sci. Discuss., 2, C116–C118, 2010 www.drink-water-eng-sci-discuss.net/2/C116/2010/© Author(s) 2010. This work is distributed under the Creative Commons Attribute 3.0 License.

Drinking Water Engineering and Science Discussions

DWESD

2, C116-C118, 2010

Interactive Comment

Interactive comment on "Water quality and treatment of river bank filtrate" by W. W. J. M. de Vet et al.

W. W. J. M. de Vet et al.

w.w.j.m.devet@tudelft.nl

Received and published: 5 February 2010

General comments

Remark: We thank you for your kind and positive general appraisal.

Specific comments

> Introduction: It would be interesting to learn something about the percentage of RBF in water supply in the Netherlands.

Added: Based on the definition of at least 10 % infiltrated surface water, the share of river groundwater in the Netherlands in 2007 was 62 millions m³, 5 % of the total abstracted amount for drinking water production (VEWIN, 2008).

> Page 129, line 16: In what way does residence time variation contribute to the

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

Discussion Paper



reduction of micropollutant concentrations?

Added: The latter applies to peak concentrations in the river water, which are reduced in the well by blending with earlier and later infiltrated water containing lower micro pollutant concentrations.

Note: The reduction of peak concentrations by variation of the residence time was documented for several point discharges, like the Sandoz disaster, in the given reference by Sontheimer (1991).

- > Page 130, line 2: Please define the ORP! Do you mean the redox potential? Reply: the oxidation / reduction potential (ORP) is indeed the same as redox potential; for consistency's sake we dropped the expression oxidation / reduction potential (ORP) and only used redox potential.
- > Page 130, line 3: The hardness doesn't generally increase in RBF. It depends on the aquifer material.

Replaced: The hardness of the water greatly increases during RBF. by The hardness of the water may increase during RBF due to the dissolution of alkaline minerals.

> Page 136, line 24: The rate of iron or manganese oxidation is mostly described to be proportional to the OH- concentration squared.

Added: squared

Technical corrections

> Table 1: Ammonia: The second reaction equation should start on a new line.

This layout problem will be corrected.

Manganese: The number 1 in the reaction equation should be omitted.

Corrected

> Table 2: Table caption: It is better to specify the distribution coefficients by adding "water/air".

Replaced: (in mass/mass) by (mass in water/mass in air)

Oxygen is missing in the caption.

Added: oxygen in caption

DWESD

2, C116-C118, 2010

Interactive Comment

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

Discussion Paper



Interactive comment on Drink. Water Eng. Sci. Discuss., 2, 127, 2009.

DWESD

2, C116-C118, 2010

Interactive Comment

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

Discussion Paper

