Drink. Water Eng. Sci. Discuss., 2, C116–C118, 2010
www.drink-water-eng-sci-discuss.net/2/C116/2010/

Drinking Water Engineering and Science Discussions

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

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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 m^3, 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

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

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