

Interactive comment on “Modeling particle transport and discoloration risk in drinking water distribution networks” by Joost van Summeren and Mirjam Blokker

Anonymous Referee #1

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This paper shows that relevant hydraulic processes for particle transport in water distribution systems are gravitational settling, bed-load transport and resuspension. Dimensionless numbers are given for characterizing the importance of each phenomenon.

This technical paper fits well within the scope of the Journal Drink. Water Eng. Sci. It is well-written and there is sufficiently novelty in the paper. This contribution is potentially useful to the profession.

This reviewer suggests extending the bibliography review in the introduction section to describe the particle transport and sediment transport models developed in the FP7 TECHNEAU project. A multi-layer pipe model was coupled with Epanet.

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Minor issues are summarized below:

Minor issue 1) Page 3 line 16, ‘appurtances’? 2) Page 3, culverts in DWDNs? 3) Pp. 6 and 8, line15, remove the line breaks before Table 2

For, all these reasons it is recommended:

Recommendation The paper is potentially useful to the profession. The minor suggested revision does not required re-review.

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