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Drinking Water
Engineering and Science
Discussions

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

Anonymous Referee #2

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General comments: The paper identifies important hydraulic processes that may govern particle transport and discolouration risk in drinking water distribution networks. It is well-written and carefully structured.

Specific comments: The reviewer would recommend to discuss in more detail the drawbacks of the identified models available in literature, as the presented formulation will also need further calibration, particularly if particle properties and the local water chemistry are added. The paper would also benefit with practical considerations of real systems, as the network characteristics or occurring circumstances (e.g., branched or looped networks, flow patterns) may be expected to interfere with the relative impor-

tance of each process (stagnation, bed load and resuspension).

Technical comments: Figures should be carefully revised. Apart from more detailed descriptions to support them, including the referencing of values in the text, the axes in the figures are confusing. In figure 2 the reference to "additional common conditions" should be better explained. Legend in figure 3 should be corrected (not excess density, but particle diameter) and the identified thresholds better highlighted and linked to the text.

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