

Interactive comment on “Numerical Analysis of Circular Settling Tank” by Elahe Chero et al.

Anonymous Referee #3

Received and published: 28 April 2019

Thank you for the opportunity to review the manuscript “Numerical Analysis of Circular Settling Tank” The paper outlined the numerical analysis using CEM-CFD modelling of circular settling tanks and the numerical results compared with the actual data from a wastewater treatment plant in Chicago. The numerical data and the field data, as reported in the manuscript, showed very good correlation. This indicated that the method of analyses can be reliably used to optimize settling tank size at the design stage. However, I have some concerns that in my opinion should be addressed before final publication: 1. The English grammar MUST be addresses. In many instances in the manuscript, what the authors would like to say are confused due to the poor English. 2. The units used should be SI units throughout the manuscript. 3. The measurements in the manuscript needs double-checking and correcting. Eg. line 138 ‘baffle height of 2.13 ft’ and should be 2.13m; line 141 ‘tank baffle of 5 m’ and what is meant is 5 ft; line 161 the word ‘depth’ should be diameter. 4. The conversion from ‘ft’

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to ‘m’ need correcting throughout the manuscript. In the figures the conversions must be corrected. 12 ft is given as 0.3m should be 3.65m 13 ft is gives as 0.33m should be 3.96m 14 ft is given as 0.35m should be 4.27m 15 ft is gives as 0.38m should be 4.57m 5. The introduction section should be shortened. The extensive description from the references can be summarized and shortened. 6. If possible, more details about the numerical analysis methodology can be given instead of the lengthy introduction. 7. The quality of figures 5, 6, 7, and 8 needs improving.

Interactive comment on Drink. Water Eng. Sci. Discuss., <https://doi.org/10.5194/dwes-2019-6>, 2019.

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