## **Accepted Manuscript**

Evaluation of three turbulence models in predicting the steady state hydrodynamics of a secondary sedimentation tank

Haiwen Gao, M.K. Stenstrom

PII: S0043-1354(18)30527-X

DOI: 10.1016/j.watres.2018.06.067

Reference: WR 13894

To appear in: Water Research

Received Date: 27 January 2018

Revised Date: 27 June 2018 Accepted Date: 28 June 2018

Please cite this article as: Gao, H., Stenstrom, M.K., Evaluation of three turbulence models in predicting the steady state hydrodynamics of a secondary sedimentation tank, *Water Research* (2018), doi: 10.1016/j.watres.2018.06.067.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



## ACCEPTED MANUSCRIPT

- 1 Evaluation of three turbulence models in predicting the steady state
- 2 hydrodynamics of a secondary sedimentation tank
- 3 Haiwen Gao, M.K. Stenstrom
- 4 Dept. of Civil and Environmental Engineering, University of California Los Angeles,
- 5 5714 Boelter Hall, Los Angeles, CA 90095, USA
- 6 **Nomenclature**
- 7 CFD Computational fluid dynamics
  8 SKE Standard k- $\varepsilon$  model
  9 RNG Renormalization group k- $\varepsilon$  model
  10 RAS Returned activated sludge
- 11 SBH Sludge blanket height
- 12 ESS Effluent suspended solids
- 13 SST Secondary sedimentation tank
- 14 SS Suspended solids
- 15 SOR Surface overflow rate
- 16 1-D One dimensional
- 17 2-D Two dimensional

## Download English Version:

## https://daneshyari.com/en/article/8873562

Download Persian Version:

https://daneshyari.com/article/8873562

<u>Daneshyari.com</u>