## Supporting materials

Hydrogen sulfide generation and emission in urban sanitary sewer in China: What factor plays the critical role?

Zhiqiang Zuo<sup>1</sup>, Jian Chang<sup>4</sup>, Zhengsheng Lu<sup>1</sup>, Moran Wang<sup>1</sup>, Yucong Lin<sup>2</sup>, Min Zheng<sup>1, 5</sup>, David Z. Zhu<sup>3</sup>, Tong Yu<sup>3</sup>, Xia Huang<sup>1</sup>, Yanchen Liu<sup>1,\*</sup>

<sup>1</sup> State Key Joint Laboratory of Environment Simulation and Pollution Control, School of Environment, Tsinghua University, Beijing 100084, China

<sup>2</sup> Center for Statistical Science and Department of Industrial Engineering, Tsinghua University, Beijing 100084, China.

<sup>3</sup> Dept. of Civil and Environmental Engineering, Univ. of Alberta, Edmonton, AB, Canada T6G 2W2

<sup>4</sup>Beijing Municipal Engineering Design and Research Institute, Beijing, 100082, China

<sup>5</sup>Advanced Water Management Centre, the University of Queensland, QLD, Australia

## $\hbox{$^*$Corresponding author}\\$

Email: liuyc@mail.tsinghua.edu.cn

Table S1. T test for sulfide formation with wastewater quality

Parameter	Unit	Coefficient	Std. Error	Pr (>   t   )	VIF
		estimation			
Intercept		5.399e-1	1.822e-1	0.00323**	
COD	mg/L	-1.10e-3	3.1e-4	0.00049***	1.080
Conductivity	us/m	1.49e-4	3.98e-5	0.00021***	1.815
Velocity	cm/s	-7.21e-3	3.4e-3	0.03442*	1.828

0<'\*\*\*' <0.001<'\*\*' <0.01< '\*' <0.05