Supplementary Information (SI)

for

Mechanistic insights into extracellular reductive dechlorination of hexachloroethane by common non-electroactive bacteria *Bacillus subtilis* and *Escherichia coli*

Sadiq Naveed[a], Xinwei Zhou[b], and Dongqiang Zhu[a, *]

[a] Key Laboratory of the Ministry of Education for Earth Surface Processes, College of Urban and Environmental Sciences, Peking University, Beijing 100871, China

[b] College of Environmental and Chemical engineering, Jiangsu University of Science and Technology, Jiangsu, 212003, P.R. China

[*]Corresponding author. Tel.: +86 010-6276-6405. E-mail: zhud@pku.edu.cn (D. Zhu)

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Section I.

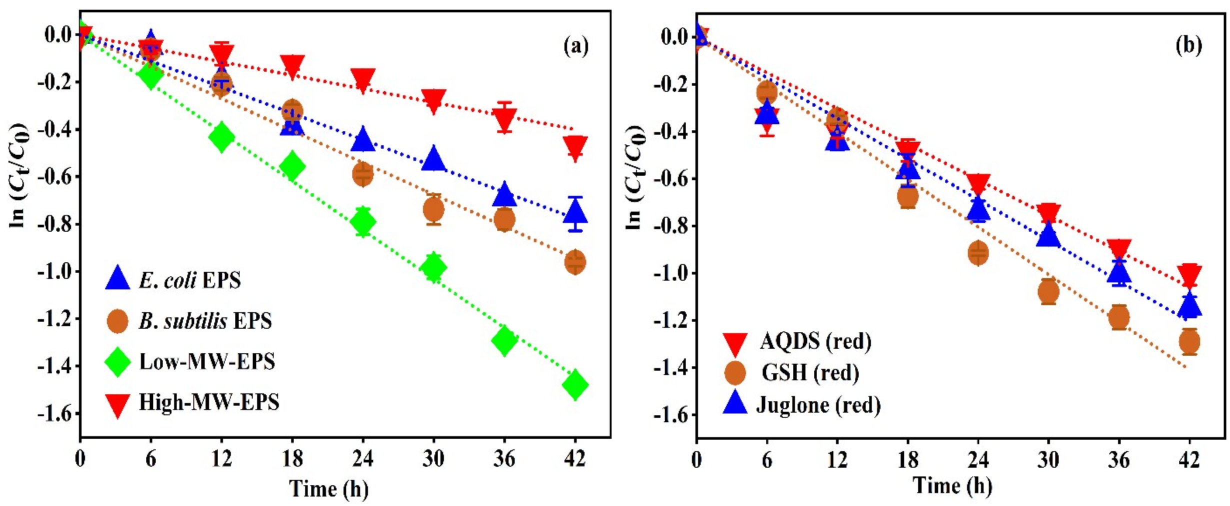

Fig. S1. Pseudo-first-order reaction kinetics plotted as ln (C_t/C_0) vs. time (0-42 h) for reduction of HCE at pH 7.0 and 30 °C in the dark by bulk EPS from *B. subtilis* and *E. coli* (initially at 50 mg C/L) and fractional EPS from *B. subtilis* (low-MW EPS initially at 28.9 mg C/L; high-MW EPS initially at 18.2 mg C/L) (a) and in aqueous solutions of model compounds (reduced AQDS initially at 2 mM; reduced GSH initially at 2 mM; reduced juglone initially at 25 µM) (b). Reaction conditions: 20 µM HCE at pH 7.0 and 30 °C in the dark. Error bars represent standard deviations of three replicates.

Section II.

Table S1. One-electron reduction potentials (E^o_1, V) of different organic compounds versus standard hydrogen potential (SHE) at pH 7.0.

Compounds	E^o_1 (V)	References
Hexachloroethane (HCE)	0.144	[1, 2]
Pentachlorethane (PCE)	0.092	[1]
Tetrachloroethylene (TCE)	-0.598	[2]
Nitrobenzene	-0.486	[3]
1, 3 dinitrobenzene (1,3-DNB)	-0.345	[3, 4]
Glutathione (GSH)	-0.250	[5]
Anthraquinone-2,6-disulfonic acid (AQDS)	-0.250	[6]
Juglone	-0.093	[7]

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