Supporting Information

Chlorinated Paraffins in Sediments from the Pearl River Delta, South China: Spatial and Temporal Distributions and Implication for Processes

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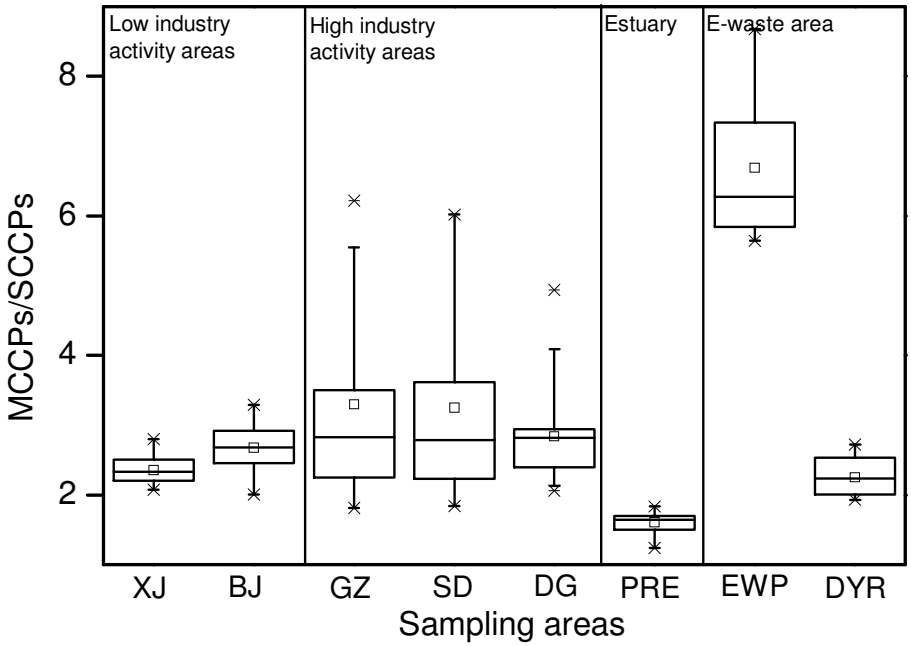

Figure SI-1. The ratios of MCCPs/SCCPs in sediments. XJ: Xijiang River; BJ: Beijiang River; GZ: Guangzhou section; SD: Shunde section; DG: Dongguan section; PRE: Pearl River Estuary; EWP: pond of e-waste area; DYR: Dayan River.

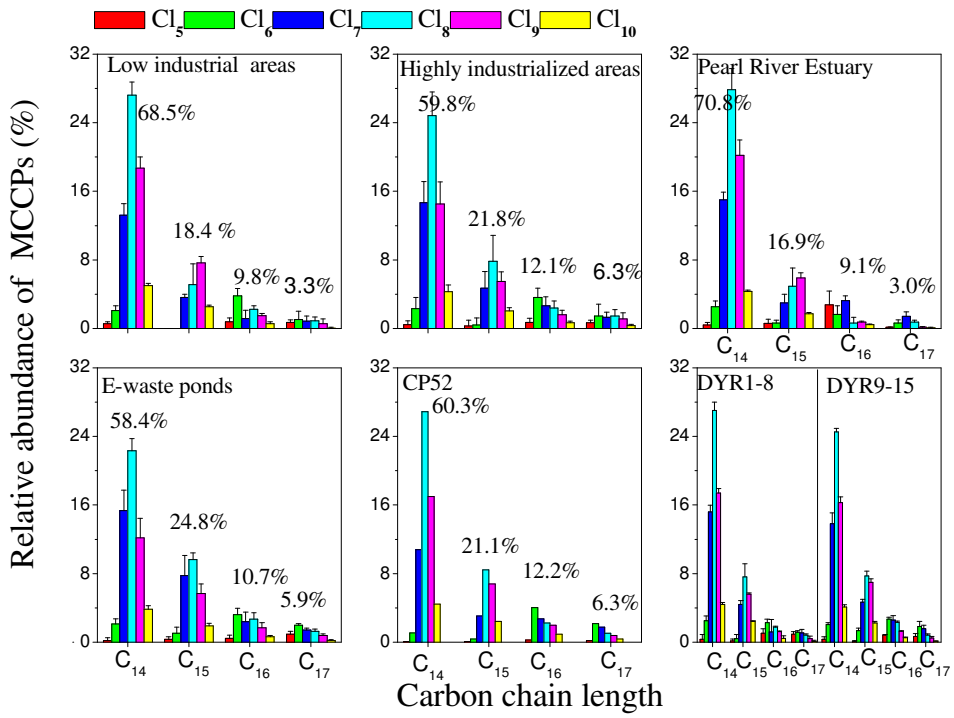

Figure SI-2. MCCP congener profiles in different sampling areas: Low industrial areas: Beijiang River and Xijiang River; Highly industrialized areas: Guangzhou, Shunde, and Dongguan section; DYR: Dayan River; CP52: a commercial CP mixture used in China. The values above the bar represent the contribution of each homologue group to total MCCPs.

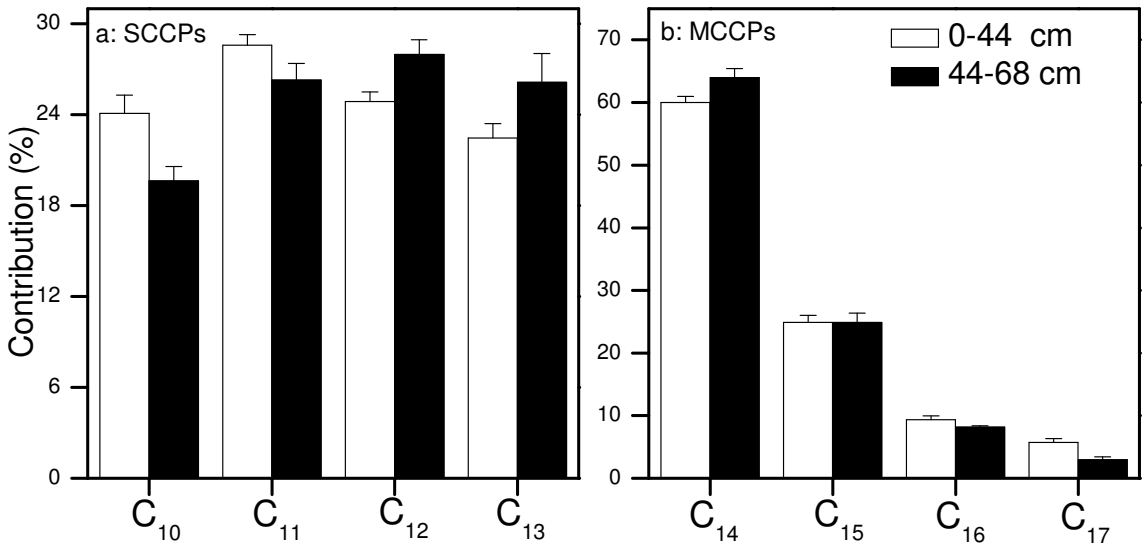

Figure SI-3. Homologue patterns of SCCPs (a) and MCCPs (b) in sediment core from 0-44 cm and 44-68 cm from the DG (Dongguan section) of the Pearl River Delta, China.

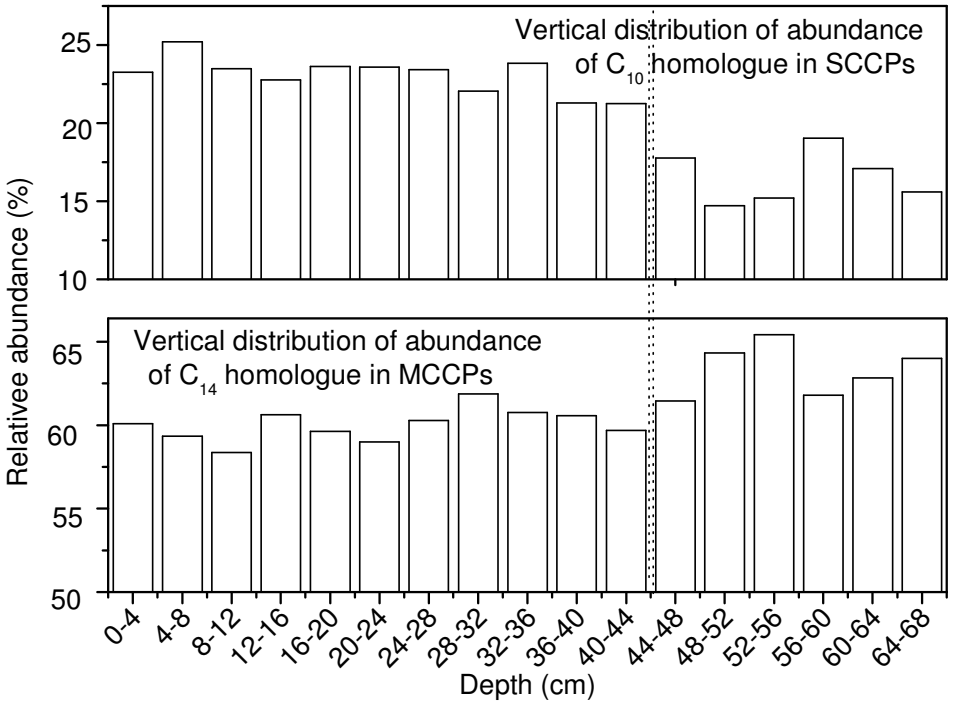

Figure SI-4.Vertical distributions of abundance C_{10} homologue group in SCCPs and C_{14} homologue group in MCCPs of the sediment core from the DG (Dongguan section) of the Pearl River Delta, China.

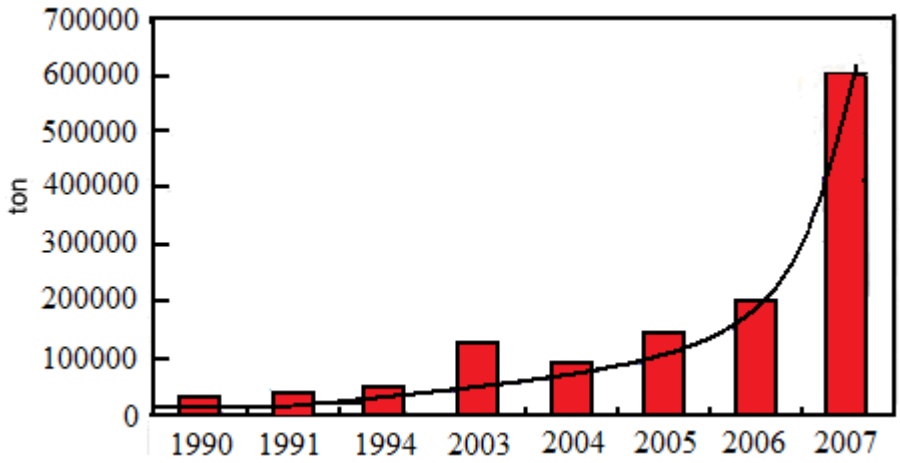

Figure SI-5. Production of CPs in China. (Cited from *Handbook of Environmental chemistry vol 10*, Chlorinated Paraffins. editor: de Boer Jacob **.** 2010 Page 8**.**)

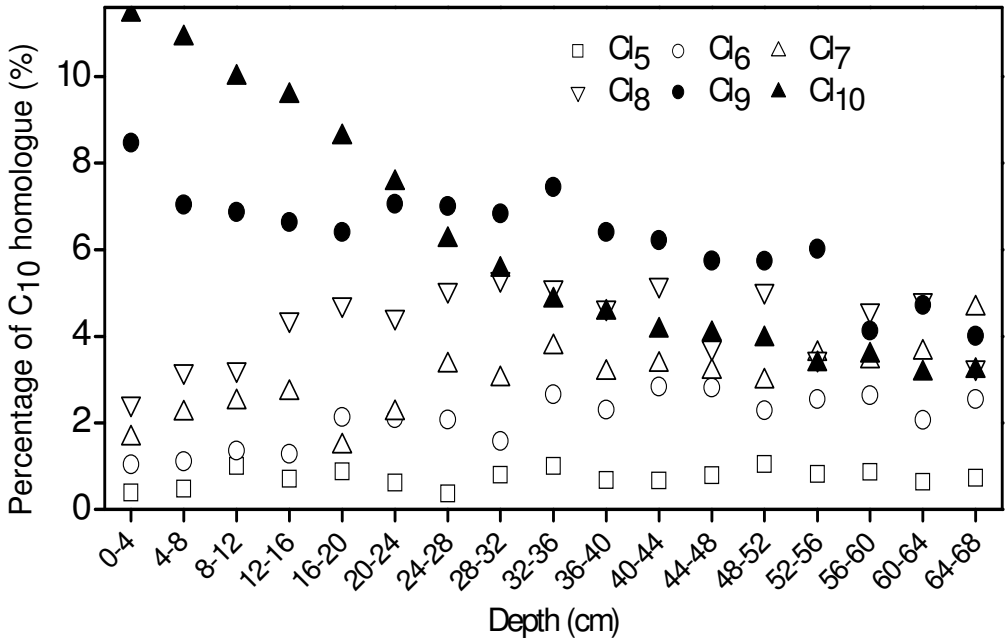

Figure SI-6. Vertical distributions of the abundance of Cl_5-Cl_{10} congeners to C_{10} homologue group of SCCPs.

Table SI-1. The slopes of regression lines between depth (cm) and abundance (%) of each molecular formula to total SCCPs or MCCPs in sediment core.

	Cl_5	Cl_6	Cl_7	Cl_8	Cl_9	Cl_{10}
C_{10}	0.00	0.02	0.03	0.02	-0.07	-0.14
C_{11}	0.03	0.03	0.05	0.02	-0.05	-0.09
C_{12}	0.02	0.06	0.06	0.03	-0.03	-0.08
C_{13}	0.03	0.06	0.06	0.01	-0.02	-0.05
C_{14}	0.02	0.01	0.06	0.01	-0.01	-0.04
C_{15}	0.02	0.01	0.02	-0.01	-0.01	-0.02
C_{16}	0.01	0.02	0.00	-0.01	-0.02	-0.02
C_{17}	0.01	0.01	-0.02	-0.02	-0.02	-0.01