

Supplementary Information

MANUSCRIPT TITLE: Safety assessment of the source water within the Pearl River Delta on the aspect of organochlorine pesticides contamination

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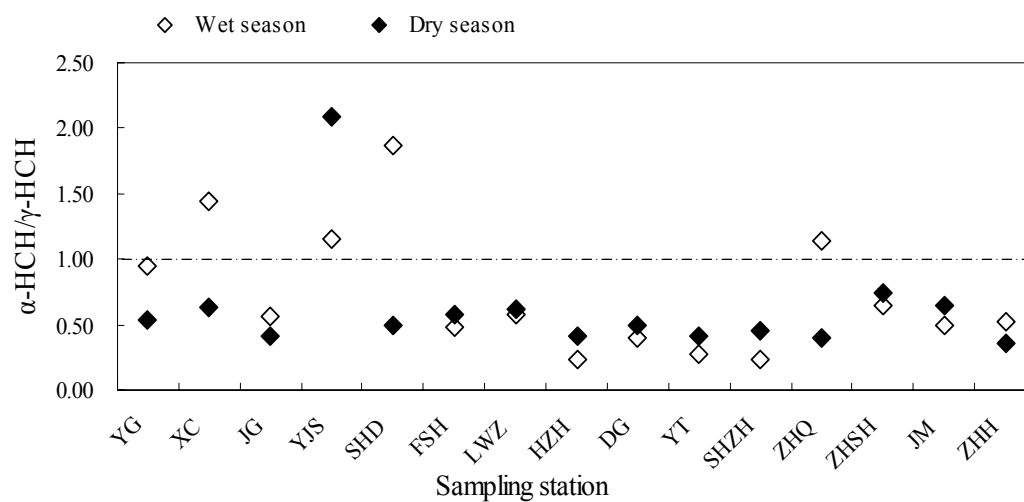


Figure S1. Ratios of α -HCH and γ -HCH at different sampling stations.

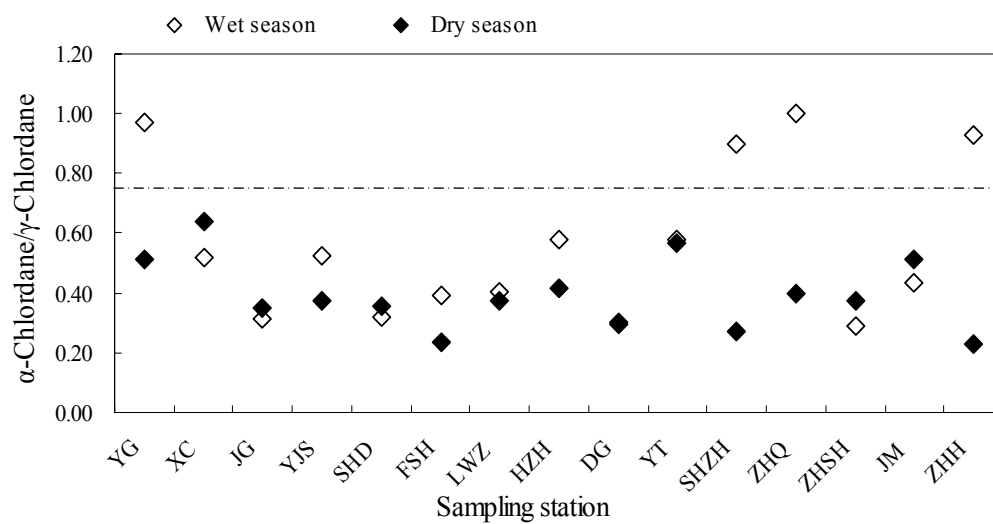


Figure S2. Ratios of α -chlordane and γ -chlordane at different sampling stations.

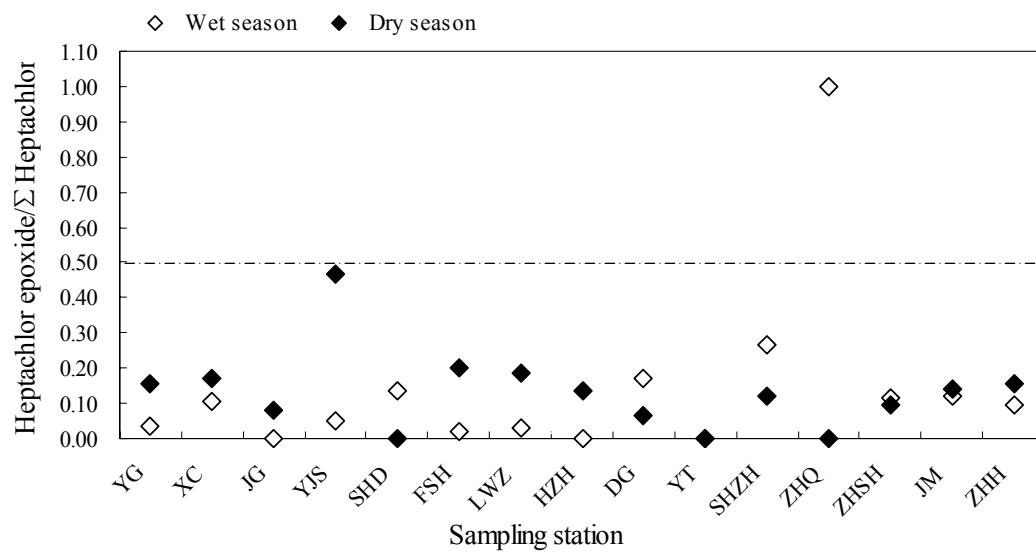


Figure S3. Ratios of heptachlor epoxide and total heptachlor at different sampling stations.

Table S1 Summary of sampling stations and conditions when collected

City	Sample	Wet season				Dry season			
		PH	TSS (mg/l)	DOC(mg/l)	POC(mg/l)	PH	TSS (mg/l)	DOC(mg/l)	POC(mg/l)
Guangzhou	YG	7.87	11.07	4.49	2.74	7.86	18.75	2.13	1.54
	XC	8.5	63.7	5.15	7.03	8.58	75.32	13.96	14.52
	JG	7.72	98.25	1.39	1.88	8.15	18.82	3.60	2.56
	YJS	7.3	19.06	1.45	0.64	8.25	13.79	2.72	1.09
	SHD	7.28	26.12	2.02	1.36	7.81	15.54	1.01	0.46
Huizhou	LWZ	7.27	49.46	0.97	1.02	7.28	14.26	0.94	0.39
	HZH	7.86	12.27	0.79	0.30	7.17	10	0.51	0.29
	DG	7.2	9.41	1.09	0.31	7.68	26.35	0.68	0.44
Dongguan	YT	7.67	32.94	1.47	1.51	7.78	26.79	0.96	1.20
Shenzhen	SHZH	7.37	25.51	1.19	0.73	7.41	24.23	0.60	0.89
Foshan	FSH	8.31	18.88	1.21	0.51	7.78	11.65	1.02	0.85
Zhaoqing	ZHQ	8.56	6.9	1.40	0.20	7.99	14.5	1.26	1.09
Zhongshan	ZHSH	8.16	10.92	1.96	0.35	8.26	11.54	0.86	0.31
Jiangmen	JM	8.6	12.67	1.37	0.42	7.91	7.94	0.78	0.42
Zhuhai	ZHH	8.18	31.02	2.77	0.95	7.84	18.06	1.39	0.84

TSS, total suspended solid; DOC, dissolved organic carbon; POC, particulate organic carbon

Table S2 Concentrations of OCPs (ng/l) in wet season

	Dissolved OCPs (ng/l)			Particulate OCPs (ng/l)		
	Range	Mean	Detectable frequency (%)	Range	Mean	Detectable frequency (%)
α -HCH	0.21-1.73	0.48	100	0.03-3.19	0.26	100
β -HCH	0.20-2.58	0.72	100	0.03-3.40	0.3	100
γ -HCH	0.22-1.10	0.7	100	0.05-2.27	0.26	100
δ -HCH	nd-0.58	0.23	93	0.05-2.46	0.24	100
DDD	nd-0.18	0.08	93	0.03-3.99	0.35	100
DDE	nd-0.25	0.05	73	nd-0.21	0.02	27
DDT	nd-1.29	0.24	73	nd-1.71	0.27	67
α -Chlordane	0.04-1.35	0.28	100	0.01-1.85	0.17	100
γ -Chlordane	0.06-2.27	0.55	100	0.02-2.93	0.26	100
Heptachlor	nd-1.94	0.51	93	nd-2.84	0.28	93
Heptachlor epoxide	nd-0.23	0.06	67	nd-0.56	0.04	27
α -Endosulfan	0.12-6.83	0.95	100	nd-0.49	0.06	53
β -Endosulfan	nd-0.25	0.03	53	nd-0.38	0.05	60
Endosulfan sulfate	nd-0.42	0.04	27	nd-0.26	0.02	7
Aldrin	nd-0.04	0.01	27	nd-0.02	0	27
Dieldrin	0.04-0.23	0.09	100	0.01-4.81	0.39	100
Endrin	nd-0.29	0.08	73	nd-0.04	0	7
Endrin aldehydes	nd-0.51	0.08	73	nd-0.10	0.02	60
Endrin ketone	nd-3.1	0.47	47	nd-0.08	0.01	13
Methoxychlor	nd-0.13	0.03	40	nd-0.05	0.02	33
Σ OCPs	2.37-15.79	5.69		0.39-30.51	3.01	

nd, not detected.

Table S3 Concentrations of OCPs (ng/l) in dry season

	Dissolved OCPs (ng/l)			Particulate OCPs (ng/l)		
	Range	Mean	Detectable frequency (%)	Range	Mean	Detectable frequency (%)
α -HCH	0.13-1.92	0.34	100	0.03-0.23	0.06	100
β -HCH	0.16-0.75	0.27	100	0.01-0.14	0.04	100
γ -HCH	0.27-0.87	0.48	100	0.05-0.36	0.11	100
δ -HCH	nd-0.18	0.08	93	nd-0.2	0.05	93
DDD	0.04-0.25	0.10	100	0.02-0.41	0.11	100
DDE	nd-0.22	0.07	87	nd-0.17	0.02	67
DDT	nd-0.14	0.07	93	nd-0.15	0.03	47
α -Chlordane	0.02-0.27	0.11	100	0.01-0.2	0.05	100
γ -Chlordane	0.08-0.63	0.28	100	0.02-0.37	0.10	100
Heptachlor	nd-0.22	0.13	87	nd-0.44	0.11	93
Heptachlor epoxide	nd-0.08	0.02	72	nd-0.09	0.01	47
α -Endosulfan	0.04-6.02	1.18	100	0.01-0.67	0.09	100
β -Endosulfan	nd-0.1	0.04	73	nd-0.12	0.03	73
Endosulfan sulfate	nd-6.89	2.37	93	nd-0.27	0.04	20
Aldrin	nd-nd	0.00	0	nd-nd	0.00	0
Dieldrin	0.04-2.11	0.53	100	0.02-0.6	0.12	100
Endrin	nd-0.51	0.07	40	nd-0.06	0.01	20
Endrin aldehydes	nd-0.09	0.02	40	nd-0.03	0.00	13
Endrin ketone	nd-0.74	0.22	67	nd-0.83	0.06	7
Methoxychlor	nd-0.05	0.03	73	nd-0.04	0.01	20
Σ OCPs	1.99-12.99	6.42		0.35-3.62	1.05	

nd, not detected.