

**Table S1.** Concentrations of PCDD/PCDF congeners in soil, dust and surface sediment samples from e-waste recycling sites of Longtang, southern China

Congeners	Concentration (ng/kg dw)															
	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	S13	S14	S15	S16
<b>2378-TCDF</b>	21.1	15.4	48.4	22.0	38.2	33.5	2.8	2.2	12.9	4.5	67.6	4.3	6.1	12.0	35.3	13.4
<b>12378-PeCDF</b>	27.6	17.4	29.1	28.6	50.5	40.0	3.3	3.3	16.5	5.4	107.1	8.2	18.6	16.9	52.4	11.1
<b>23478-PeCDF</b>	32.8	16.2	27.4	20.4	53.7	43.6	3.2	3.1	17.2	8.3	114.3	8.1	22.8	14.0	59.6	11.4
<b>123478-HxCDF</b>	41.9	18.1	51.6	41.2	93.0	51.0	4.8	4.5	26.8	6.0	184.6	11.7	34.4	18.8	83.1	14.3
<b>123678-HxCDF</b>	30.5	15.7	25.8	23.7	59.6	39.7	3.7	3.4	21.1	4.1	153.2	7.6	25.7	14.1	67.7	9.8
<b>234678-HxCDF</b>	39.8	16.7	29.8	22.4	64.3	39.2	4.3	4.1	23.8	4.8	178.2	7.5	38.8	14.1	85.3	12.4
<b>123789-HxCDF</b>	10.0	4.0	4.4	11.2	16.8	14.6	1.5	1.6	6.9	1.5	45.8	1.4	8.6	5.5	16.4	2.7
<b>1234678-HpCDF</b>	147.7	54.2	126.1	112.3	289.1	161.1	40.1	14.6	96.5	16.4	772.6	33.3	119.1	50.2	347.6	52.8
<b>1234789-HpCDF</b>	15.3	4.5	18.0	24.6	30.1	19.9	4.3	1.9	11.7	2.1	83.7	5.6	11.0	7.8	29.5	5.5
<b>OCDF</b>	80.1	40.9	93.0	156.5	263.3	192.2	234.3	10.2	143.9	17.9	953.2	35.4	49.2	59.5	129.6	69.2
<b>∑PCDF</b>	446.7	203.1	453.7	463.0	958.6	634.9	302.2	48.8	377.2	71.1	2660	123.0	334.3	212.9	906.3	202.7
<b>2378-TCDD</b>	1.2	0.7	0.8	1.1	2.1	2.0	0.6	0.1	0.5	0.3	2.6	0.3	0.3	0.5	2.8	0.5
<b>12378-PeCDD</b>	7.3	4.7	7.6	5.2	13.2	9.5	4.5	1.3	3.6	1.6	26.7	1.8	4.2	5.4	10.3	2.7
<b>123478-HxCDD</b>	12.4	5.6	42.1	17.1	28.8	33.2	19.3	4.7	9.9	3.0	64.8	2.7	13.1	6.4	26.7	14.9
<b>123678-HxCDD</b>	13.0	5.1	54.9	18.0	30.5	39.9	21.3	5.3	10.5	3.2	73.9	3.0	12.3	6.0	29.8	12.8
<b>123789-HxCDD</b>	10.7	3.5	12.7	6.1	16.3	9.8	9.3	2.4	5.7	1.3	37.7	2.5	7.2	3.3	25.2	4.1
<b>1234678-HpCDD</b>	137.4	79.9	1130	454.5	434.2	789.9	926.1	240.4	253.8	48.4	881.7	83.7	266.2	72.3	305.4	369.0
<b>OCDD</b>	7987	4802	49066	11896	14406	16130	30735	14817	15343	1445	14561	12361	7433	4046	5968	9062
<b>∑PCDD</b>	8169	4902	50315	12398	14931	17014	31716	15071	15627	1502	15648	12455	7737	4140	6368	9466
<b>∑2,3,7,8-PCDDs/Fs</b>	8616	5105	50768	12861	15890	17649	32018	15120	16004	1574	18308	12578	8071	4353	7274	9669
<b>WHO-TEQ</b>	48.1	24.6	68.2	41.2	88.4	72.8	26.3	10.1	30.5	10.1	191.3	13.0	36.2	23.5	89.9	23.2

Congeners	Concentration (ng/kg dw )														Sediment
	S17	S18	S19	S20	S21	S22	S23	S24	D1	D2	D3	D4	D5	D6	
<b>2378-TCDF</b>	21.6	16.4	9.9	18.3	32.0	18.8	12.3	3.7	174.6	2.3	37.0	45.9	179.7	423.2	76.6
<b>12378-PeCDF</b>	24.1	13.3	8.3	14.4	30.8	9.9	12.6	5.5	253.0	2.9	73.5	36.3	294.4	758.7	97.1
<b>23478-PeCDF</b>	23.8	13.5	7.5	12.4	27.5	6.8	10.0	4.6	352.8	2.9	16.1	57.2	287.8	1063	85.2
<b>123478-HxCDF</b>	29.0	14.3	9.1	13.6	38.0	9.3	16.7	5.2	419.8	4.4	23.8	48.5	280.8	1143	118.0
<b>123678-HxCDF</b>	23.7	11.7	6.8	11.0	26.8	5.8	11.2	4.5	329.2	3.4	31.9	43.9	261.7	1115	82.8
<b>234678-HxCDF</b>	28.9	13.1	7.2	10.6	32.5	5.7	12.6	4.3	460.9	3.4	18.2	53.2	257.8	1380	77.4
<b>123789-HxCDF</b>	8.0	3.6	2.3	3.8	10.1	2.1	4.8	1.9	71.8	1.3	13.3	13.8	72.7	334.9	25.0
<b>1234678-HpCDF</b>	99.1	42.4	25.6	38.8	109.8	21.3	88.0	13.2	1401	11.6	81.5	177.7	722.3	4324	286.4
<b>1234789-HpCDF</b>	11.9	5.5	3.6	6.0	15.9	3.8	11.3	2.9	102.0	1.5	18.3	22.4	75.0	402.2	33.0
<b>OCDF</b>	74.1	28.2	24.1	37.7	94.7	24.5	327.9	10.9	347.0	7.3	79.8	178.9	228.8	1527	218.2
<b>∑PCDF</b>	344.1	162.2	104.5	166.6	417.9	108.1	507.4	56.7	3912	40.9	393.4	677.8	2661	12473	1100
<b>2378-TCDD</b>	0.9	0.4	0.4	1.2	1.5	0.2	0.6	0.3	3.0	0.1	0.2	1.2	9.8	36.8	5.7
<b>12378-PeCDD</b>	6.7	2.9	5.5	5.0	6.1	1.8	2.9	1.1	63.4	0.3	5.1	8.5	42.6	160.9	20.4
<b>123478-HxCDD</b>	22.8	7.4	25.2	19.2	10.7	2.9	12.0	3.1	96.0	0.9	10.9	14.5	58.0	312.6	30.0
<b>123678-HxCDD</b>	24.7	8.3	27.9	21.1	12.1	3.4	13.7	3.6	98.3	0.9	14.4	15.9	72.1	319.0	35.6
<b>123789-HxCDD</b>	9.4	3.2	68.1	8.3	7.5	1.6	3.3	1.3	88.8	1.0	3.2	14.1	62.3	288.7	21.2
<b>1234678-HpCDD</b>	586.4	157.6	858.5	654.0	106.2	81.4	537.1	63.3	822.8	11.2	241.9	328.7	322.4	1989	357.0
<b>OCDD</b>	13843	4521	39955	18078	2162	2058	12935	1911	14947	2277	2561	3313	10300	26479	9940
<b>∑PCDD</b>	14494	4701	40941	18786	2306	2150	13505	1984	16119	2291	2837	3696	10867	29587	10410
<b>∑2,3,7,8-PCDDS/Fs</b>	14838	4863	41046	18953	2724	2258	14012	2041	20032	2332	3230	4374	13528	42060	11510
<b>WHO-TEQ</b>	45.9	21.0	38.6	32.5	42.4	12.2	25.4	7.7	454.2	4.2	36.0	70.7	347.7	1369	128.0