

## Supporting Information

Detection of Hydroxylated Polychlorinated Biphenyls (OH-PCBs) in the Abiotic Environment: Surface Water and Precipitation from Ontario, Canada

Daisuke Ueno<sup>1,2</sup>, Colin Darling<sup>2</sup>, Mehran Alaei<sup>2</sup>, Linda Campbell<sup>3</sup>, Grazina Pacepavicius<sup>2</sup>, Camilla Teixeira<sup>2</sup>, Derek Muir<sup>2\*</sup>

<sup>1</sup> Department of Applied Biological Sciences, Faculty of Agriculture, Saga University, Honjo 1, Saga, 840-8502, Japan

<sup>2</sup> Aquatic Ecosystem Protection Research Division, Environment Canada, 867 Lakeshore Road, Burlington, ON, L7R 4A6, Canada.

<sup>3</sup> School of Environmental Studies, Queen's University, Kingston, ON, K7L 3N6, Canada

Supporting Information 1 OH-PCBs and PCBs fluxes in snow collected from southern Ontario, Canada

Detec: Compound Name	Fluxes (pg/m <sup>2</sup> )									mean	min	max
	Grimsby	Pinery P.P.	MacGregor P.P.	Turkey	Evansville	Dorset	Sibbald P.P.	Guelph Lake	Pine Valley			
	S1	S2	S3	S6	S7	S8	S10	S11	S13			
<b>Mono OH-PCBs</b>												
	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	
6-OH-PCB 2										n.d.		
4-OH-PCB 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	n.d.	<1	
4-OH-PCB 2	<1	<1	<1	<1	<1	<1	<1	<1	<1	n.d.	<1	
Un-identified	4.4	6.4	<1	4.9	4.5	1.5	4.9	7.8	<1	3.8	<1	7.8
Total	4.4	6.4	<1	4.9	4.5	1.5	4.9	7.8	<1	3.8	<1	7.8
<b>Di OH-PCBs</b>												
2'-OH-PCB 9	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
2'-OH-PCB 5	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
3'-OH-PCB 9	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
4'-OH-PCB 14	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
4'-OH-PCB 9	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
2'-OH-PCB 12	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
Un-identified	15	15	3.5	17	16	6.9	13	14	<2	11.1	<2	17.3
Total	15	15	3.5	17	16	6.9	13	14	<2	11.1	<2	17.3
<b>Tri OH-PCBs</b>												
2'-OH-PCB 30	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
3'-OH-PCB 30	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
6'-OH-PCB 26	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
4'-OH-PCB 30	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
4'-OH-PCB 18	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
4'-OH-PCB 26	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
Un-identified	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
Total	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
<b>Tetra OH-PCBs</b>												
6'-OH-PCB 69	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
2'-OH-PCB 65	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
4'-OH-PCB 50	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
3'-OH-PCB 65	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
4'-OH-PCB 72	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
2'-OH-PCB 61	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
4'-OH-PCB 69	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
4'-OH-PCB 65	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
3'-OH-PCB 61	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
4'-OH-PCB 61	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
Un-identified	4.5	4.0	2.9	3.3	<2	<2	3.6	3.6	<2	2.4	<2	4.5
Total	4.5	4.0	2.9	3.3	<2	<2	3.6	3.6	<2	2.4	<2	4.5
<b>Penta OH-PCBs</b>												
4'-OH-PCB 121	<2	<2	<2	26	<2	14	<2	<2	<2	4.4	<2	26
6'-OH-PCB 112	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
4'-OH-PCB 93	<2	<2	1.1	2.3	<2	<2	3.1	<2	<2	0.73	<2	3.1
4'-OH-PCB 120	2.9	<2	<2	<2	<2	<2	<2	<2	<2	0.33	<2	2.9
6'-OH-PCB 106	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
4'-OH-PCB 86	9.8	16	7.4	20	14	11	29	14	<2	13	<2	29
4'-OH-PCB 112	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
3'-OH-PCB 118	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
4'-OH-PCB 107	5.6	<2	<2	<2	<2	<2	<2	<2	<2	0.62	<2	5.6
4'-OH-PCB 106	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
Un-identified	2.9	<2	<2	<2	<2	<2	<2	<2	<2	0.33	<2	2.9
Total	21	16	8.5	48	14	26	32	14	<2	20	<2	48
<b>Hexa OH-PCBs</b>												
4'-OH-PCB 165	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	n.d.
4'-OH-PCB 146	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	n.d.
3'-OH-PCB 138	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	n.d.
4'-OH-PCB 130	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	n.d.
4'-OH-PCB 159	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	n.d.
Un-identified	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	n.d.
Total	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	n.d.
<b>Hepta OH-PCBs</b>												
4'-OH-PCB 187	11	3.9	<2	<2	<2	<2	<2	<2	<2	1.7	<2	11
3'-OH-PCB 180	<2	<2	<2	<2	<2	<2	<2	9.6	<2	1.1	<2	10
4'-OH-PCB 172	<2	<2	<2	15	<2	<2	<2	<2	<2	1.6	<2	15
4'-OH-PCB 193	<2	<2	<2	11	<2	<2	<2	<2	<2	1.2	<2	11
Un-identified	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
Total	11	3.9	<2	26	<2	<2	<2	9.6	<2	5.6	<2	26
<b>Octa OH-PCBs</b>												
4'-OH-PCB 202	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
4,4'-di-OH-PCB 202	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
Un-identified	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
Total	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
<b>Nona OH-PCBs</b>												
4'-OH-PCB 208	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
Un-identified	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
Total	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
<b>Summary</b>												
Total identified OH-PCBs	30	20	8.5	74	14	26	32	23	n.d.	25.2	n.d.	74.2
Total un-identified OH-PC	27	25	6.4	26	21	8.4	22	25	n.d.	17.7	n.d.	26.5
Total OH-PCBs	56	45	15	100	35	34	54	48	n.d.	43.0	n.d.	99.8
Total PCBs	27000	54000	19000	24000	8900	13000	45000	17000	1000	23000	1000	54000
Number of peaks	14	10	12	18	8	16	10	19	0	11.9	0.00	19.0
Identified OH-PCBs (%)	53	44	57	74	40	75	60	48	-	56.4	40.00	75.4
OH-PCBs/PCBs (%)	0.21	0.082	0.079	0.42	0.39	0.25	0.12	0.29	0	0.2	0.00	0.4

Identified OH-PCBs (%): percentage of identified OH-PCBs to total OH-PCBs  
 OH-PCBs/PCBs (%): percentage of total OH-PCBs to total PCBs

Supporting Information 2 OH-PCBs and PCBs fluxes in rain collected from southern Ontario, Canada

Det Compound Name	Fluxes (pg/m2/day)										mean	min	max
	Lake St. Clair, May 3-June 2	Lake St. Clair, June 3-June 30	Grand Bend, April 1- May 4	Grand Bend, April 1- May 4-June 3	Grand Bend, June 2-June 30	Rock Point, March 30-	Rock Point, April 30-June 1	Rock Point, June 1-June 29	Turkey Lakes, June 5-July 2	R10			
	R2	R3	R4	R5	R6	R7	R8	R9	R10				
<b>Mono OH-PCBs</b>													
	1.0										0.12		1.0
6-OH-PCB 2		<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	
4-OH-PCB 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	n.d.	<1	
4-OH-PCB 2	1.2	<1	<1	1.1	1.2	1.9	1.8	1.6	<1	<1	1.0	<1	1.9
Un-identified	<1	<1	<1	<1	<1	1.2	<1	<1	<1	<1	0.13	<1	1.2
Total	2.2	<1	<1	1.1	1.2	3.1	1.8	1.6	<1	<1	1.2	<1	3.1
<b>Di OH-PCBs</b>													
2'-OH-PCB 9	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
2'-OH-PCB 5	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
3'-OH-PCB 9	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
4'-OH-PCB 14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
4'-OH-PCB 9	<2	<2	<2	2.5	2.7	2.2	2.3	3.4	<2	<2	1.5	<2	3.4
2'-OH-PCB 12	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	0.30	<2	2.7
Un-identified	7.9	7.9	<2	8.7	12	15	14	<2	<2	<2	7.2	<2	15
Total	7.9	7.9	<2	11	14	18	16	3.4	2.7	<2	9.0	<2	18
<b>Tri OH-PCBs</b>													
2'-OH-PCB 30	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
3'-OH-PCB 30	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
6'-OH-PCB 26	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
4'-OH-PCB 30	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
4'-OH-PCB 18	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
4'-OH-PCB 26	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
Un-identified	11	6.5	<2	12	13	3.7	9.1	10	<2	<2	7.3	<2	13
Total	11	6.5	<2	12	13	3.7	9.1	10	<2	<2	7.3	<2	13
<b>Tetra OH-PCBs</b>													
6'-OH-PCB 69	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
2'-OH-PCB 65	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
4'-OH-PCB 50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
3'-OH-PCB 65	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
4'-OH-PCB 72	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
2'-OH-PCB 61	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
4'-OH-PCB 69	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
4'-OH-PCB 65	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
3'-OH-PCB 61	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
4'-OH-PCB 61	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
Un-identified	8.1	4.4	<2	11	11	2.9	10	11	<2	<2	6.4	<2	11
Total	8.1	4.4	<2	11	11	2.9	10	11	<2	<2	6.4	<2	11
<b>Penta OH-PCBs</b>													
4'-OH-PCB 121	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
6'-OH-PCB 112	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
4'-OH-PCB 93	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
4'-OH-PCB 120	<2	<2	<2	<2	<2	7.2	2.3	6.0	<2	<2	1.7	<2	7.2
6'-OH-PCB 106	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
4'-OH-PCB 86	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
4'-OH-PCB 112	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
3'-OH-PCB 118	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
4'-OH-PCB 107	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
4'-OH-PCB 106	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
Un-identified	<2	3.1	<2	4.2	4.8	2.1	3.3	<2	<2	<2	1.9	<2	4.8
Total	<2	3.1	<2	4.2	4.8	9.2	5.5	6.0	<2	<2	3.6	<2	9.2
<b>Hexa OH-PCBs</b>													
4'-OH-PCB 165	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
4'-OH-PCB 146	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
3'-OH-PCB 138	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
4'-OH-PCB 130	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
4'-OH-PCB 159	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
Un-identified	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
Total	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
<b>Hepta OH-PCBs</b>													
4'-OH-PCB 187	<2	<2	<2	<2	<2	<2	<2	<2	<2	2.3	0.25	<2	2.3
3'-OH-PCB 180	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
4'-OH-PCB 172	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
4'-OH-PCB 193	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
Un-identified	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
Total	<2	<2	<2	<2	<2	<2	<2	<2	<2	2.3	0.25	<2	2.3
<b>Octa OH-PCBs</b>													
4'-OH-PCB 202	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
4,4'-di-OH-PCB 202	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
Un-identified	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
Total	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
<b>Nona OH-PCBs</b>													
4'-OH-PCB 208	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
Un-identified	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
Total	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	n.d.	<2	
<b>Summary</b>													
Total identified OH-PCBs	2.2	n.d.	n.d.	3.6	4.0	11	6.3	11	4.9	4.8	n.d.	11	
Total un-identified OH-PCBs	27	22	n.d.	36	40	25	36	20	n.d.	23	n.d.	40	
Total OH-PCBs	30	22	n.d.	39	44	36	42	31	4.9	28	n.d.	44	
<b>Total PCBs</b>													
	2000	2100	7300	2600	2300	4300	2700	2500	1500	3000	1500	7300	
<b>Number of peaks</b>													
Number of peaks	42	51	0	57	61	37	39	27	2	35	0	61	
<b>Identified OH-PCBs (%)</b>													
Identified OH-PCBs (%)	7.5	0	-	9.2	8.9	31	15	35	100	26	0	100	
<b>OH-PCBs/PCBs (%)</b>													
OH-PCBs/PCBs (%)	1.4	1.0	0	1.5	1.9	0.8	1.5	1.2	0.34	1.1	0	1.9	

Identified OH-PCBs (%): percentage of identified OH-PCBs to total OH-PCBs

OH-PCBs/PCBs (%): percentage of total OH-PCBs to total PCBs



Supporting information 4 Observed and estimated partition coefficient (Koc) of OH-PCBs between water and particulate organic carbon (POC) from Lake Ontario, Canada

Compound	Congener	Estimated <sup>*a</sup>	Estimated <sup>*b</sup>	Observed <sup>*c</sup>
s) in the Abiotic Environment: Surface W.		Log Kow	log Koc	log Koc
Triclosan		5.4 <sup>*d</sup>	5.0	4.3 <sup>*e</sup>
OH-PCB				
mono	6-OH-PCB 2	2.6	1.8	3.7
di		3.3	2.5	
tri	3'-OH-PCB 30	4.0	3.2	6.7
tetra	un-identified	4.7	4.0	5.5
tetra	un-identified	4.7	4.0	6.3
penta	4'-MeOH-PCB 101	5.4	4.7	5.1
hexa	4-MeOH-PCB 134	6.1	5.3	5.0
hexa	un-identified	6.1	5.3	5.4

\*a: Kow was estimated according to fragment constant method (Lyman, 1982)

\*b:  $Koc=0.4Kow$  (Karickhoff, 1981)

\*c:  $(pg/kg\ POC)/(pg/L)$

\*d: Singer et al., 2002

\*e: unpublished data



Supporting Information 6 OH-PCB fluxes and relative retention time (RRT) in rain collected from southern Ontario, Canada

		Lake St. Clair, May 3-June 2	Lake St. Clair, June 3-June 30	Grand Bend, April 1-May 4	Grand Bend, May 4-June 3	Grand Bend, June 2-June 30	Rock Point, March 30- April 30	Rock Point, April 30-June 1	Rock Point, June 1-June 29	Turkey Lakes, June 5-July 2
Detection of Hydroxylatec	RRT	R2	R3	R4	R5	R6	R7	R8	R9	R10
		pg/m2/day	pg/m2/day	pg/m2/day	pg/m2/day	pg/m2/day	pg/m2/day	pg/m2/day	pg/m2/day	pg/m2/day
PCP	0.41	26357	25579	17442	26549	26503	30754	94652	65292	1214
Monochloro	0.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6-OH-PCB 2	0.42	1.04	0.55	0.27	0.32	0.21	0.27	0.48	0.00	0.00
Monochloro	0.43	0.00	0.00	0.38	0.21	0.25	0.63	0.46	0.00	0.00
4-OH-PCB 1	0.44	0.00	0.00	0.10	0.06	0.00	0.05	0.00	0.00	0.00
Monochloro	0.45	0.00	0.00	0.00	0.26	0.00	0.55	0.28	0.00	0.00
Monochloro	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dichloro	0.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dichloro	0.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Monochloro	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2'-OH-PCB 9	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dichloro	0.49	0.00	0.00	0.00	0.00	0.00	7.95	0.00	0.00	0.00
Monochloro	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dichloro	0.50	0.00	4.16	0.00	5.23	3.55	2.96	0.00	0.00	0.00
Monochloro	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2'-OH-PCB 5	0.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4-OH-PCB 2	0.51	1.18	0.41	0.55	1.12	1.22	1.92	1.78	1.65	0.00
Dichloro	0.51	0.00	2.82	0.00	0.00	0.00	2.38	3.83	0.00	0.00
Monochloro	0.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dichloro	0.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Monochloro	0.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dichloro	0.54	6.43	4.02	0.00	5.84	8.31	3.59	7.47	0.00	0.00
2'-OH-PCB 30	0.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.82
3'-OH-PCB 9	0.55	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.00
4-OH-PCB 14	0.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dichloro	0.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4'-OH-PCB 9	0.58	2.37	1.28	0.00	2.47	2.75	2.22	2.26	3.36	0.00
2'-OH-PCB 12	0.59	0.00	0.00	0.00	0.00	1.02	0.00	0.00	0.00	2.66
Trichloro	0.59	0.00	0.93	0.00	1.12	0.60	0.00	0.00	0.00	0.00
Dichloro	0.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dichloro	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dichloro	0.61	0.99	0.00	0.00	0.87	1.37	0.00	0.00	0.00	0.00
Trichloro	0.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dichloro	0.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dichloro	0.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3'-OH-PCB 30	0.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dichloro	0.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dichloro	0.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trichloro	0.63	0.00	0.00	0.00	1.42	2.16	0.00	0.00	0.00	0.00
Dichloro	0.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dichloro	0.64	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.00
Trichloro	0.65	1.38	0.00	0.00	1.27	1.09	0.00	0.00	0.00	0.00
6'-OH-PCB 26	0.65	1.04	0.62	0.00	1.42	0.86	0.69	1.76	0.00	0.00
Dichloro	0.65	0.00	0.22	0.00	0.29	0.00	0.00	0.00	0.00	0.00
6'-OH-PCB 26	0.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.94	0.00
Trichloro	0.67	0.00	0.00	0.00	1.31	0.00	0.00	2.83	0.00	0.00
4'-OH-PCB 18	0.67	0.00	0.96	0.00	0.54	1.72	0.00	0.85	0.00	0.00
Trichloro	0.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trichloro	0.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trichloro	0.68	4.60	2.21	0.00	3.50	4.04	1.68	5.44	6.44	1.14
Trichloro	0.68	0.00	1.15	0.00	1.98	2.39	1.03	0.00	0.00	0.00
Dichloro	0.69	1.51	0.87	0.92	0.73	1.19	1.38	2.27	0.00	0.00
Dichloro	0.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13C 4'-OH-PCB 12	0.69									
Dichloro	0.69	0.00	1.30	1.58	1.34	1.39	1.22	2.05	0.00	1.40
Trichloro	0.70	1.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trichloro	0.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trichloro	0.72	0.83	0.57	0.00	0.61	0.63	0.32	0.00	0.00	0.43
6'-OH-PCB 69	0.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tetrachloro	0.73	0.00	0.82	0.26	0.00	0.00	0.00	0.00	0.00	0.00
Trichloro	0.73	0.00	0.00	0.00	0.76	0.78	0.00	0.00	0.00	0.00
2'-OH-PCB 65	0.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trichloro	0.74	2.25	1.45	0.36	2.13	2.20	1.03	2.62	3.08	0.55
Trichloro	0.74	1.09	0.74	0.00	0.88	1.08	0.62	1.43	0.00	0.00
4'-OH-PCB 50	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13C 4'-OH-PCB 29	0.75									
Trichloro	0.75	0.00	0.41	0.47	0.43	0.00	0.35	0.00	0.00	0.40
Trichloro	0.76	0.70	0.00	0.00	0.51	1.33	0.00	1.02	0.00	0.00
Tetrachloro	0.76	0.00	0.45	0.00	0.56	0.55	0.22	0.00	0.00	0.00
Trichloro	0.77	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.00	0.00
4'-OH-PCB 26	0.77	1.62	0.94	0.34	1.13	1.33	0.69	1.82	1.93	0.44
Trichloro	0.78	0.58	0.45	0.00	0.42	0.72	0.00	0.00	0.00	0.00
Tetrachloro	0.78	0.00	0.33	0.00	0.73	0.67	0.30	0.00	1.23	0.00
Trichloro	0.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trichloro	0.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Tetrachloro	0.79	0.74	0.30	0.00	0.59	0.53	0.00	0.00	0.00	0.00
Trichloro	0.80	0.00	0.00	0.00	0.46	0.14	0.00	0.00	0.00	0.00
Tetrachloro	0.81	0.67	0.39	0.00	0.64	0.72	0.00	0.88	1.36	0.00
3'-OH-PCB 65	0.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tetrachloro	0.82	1.75	0.85	0.00	1.42	1.72	0.76	1.88	0.00	0.45
4'-OH-PCB 72	0.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.09	0.00
2'-OH-PCB 61	0.83	0.85	0.60	0.00	0.78	0.90	0.86	0.56	1.34	0.00
Trichloro	0.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tetrachloro	0.83	2.16	0.00	0.00	2.03	2.35	1.19	2.70	2.57	0.69
Trichloro	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4'-OH-PCB 69	0.84	0.78	0.34	0.25	0.54	0.59	0.56	1.04	0.76	0.10
Tetrachloro	0.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tetrachloro	0.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tetrachloro	0.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4'-OH-PCB 65	0.86	1.38	0.60	0.41	1.15	1.17	1.12	1.00	1.63	0.31
Tetrachloro	0.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tetrachloro	0.88	0.64	0.39	0.00	0.65	0.56	0.00	0.63	1.40	0.00
4'-OH-PCB 121	0.89	0.33	0.00	0.79	0.31	0.24	0.00	0.00	0.00	0.00
Tetrachloro	0.90	0.95	0.44	0.00	0.94	0.85	0.00	0.94	1.19	0.28
Tetrachloro	0.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tetrachloro	0.90	0.26	0.15	0.00	0.26	0.19	0.00	0.36	0.42	0.00
6'-OH-PCB 112	0.91	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3'-OH-PCB 61	0.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tetrachloro	0.93	0.31	0.17	0.00	0.27	0.26	0.00	0.00	0.00	0.14
Pentachloro	0.94	0.00	0.00	0.00	2.65	2.41	0.00	1.86	0.89	0.00
Tetrachloro	0.94	0.52	0.25	0.00	0.65	0.52	0.23	0.00	1.24	0.22
4'-OH-PCB 93	0.95	0.78	0.40	0.00	0.85	0.71	0.40	0.79	0.78	0.16
Tetrachloro	0.95	0.37	0.18	0.00	0.00	0.00	0.17	0.00	0.00	0.00
Hexachloro	0.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pentachloro	0.96	0.00	1.23	0.00	2.67	2.80	1.21	3.12	1.51	0.00
Tetrachloro	0.96	0.50	0.00	0.00	0.00	0.00	0.00	0.38	0.38	0.00
13C 4'-OH-PCB 61	0.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4'-OH-PCB 79 + 4'-OH-PCB 61	0.96	0.20	0.31	0.53	1.75	0.28	0.26	0.00	0.00	0.13
Pentachloro	0.97	0.00	0.51	0.00	1.43	0.62	0.00	0.00	0.00	0.00
Tetrachloro	0.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pentachloro	0.99	1.48	0.73	0.00	0.00	1.34	0.87	0.00	0.00	0.00
Pentachloro	1.00	0.68	0.00	0.00	0.00	1.06	1.73	0.00	0.00	0.00
13C-4'-OH-PCB 120	1.00									
4'-OH-PCB 120	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pentachloro	1.00	0.00	1.43	1.88	2.00	0.00	0.00	1.96	3.04	1.99
Pentachloro	1.01	0.00	0.00	0.00	0.10	0.00	0.00	0.15	0.00	0.00
2'-OH-PCB 114 + 6'-OH-PCB 11	1.02	0.66	0.50	0.00	0.87	0.75	0.00	0.62	0.00	0.00
Hexachloro	1.03	0.00	2.03	0.00	0.00	1.25	0.00	0.00	0.00	0.00
Pentachloro	1.04	0.00	0.00	0.00	2.61	2.19	0.94	2.27	0.86	0.00
4'-OH-PCB 86	1.05	0.95	0.70	0.17	0.00	0.00	0.00	1.11	0.41	0.00
4'-OH-PCB 112	1.05	0.99	0.19	0.18	0.12	1.11	0.00	0.00	0.00	0.00
3-MeOH-PCB 118	1.05	1.03	0.88	0.00	0.00	0.97	0.00	0.82	0.91	0.72
4-OH-PCB 107 + 4'-OH-PCB 1C	1.06	0.00	0.00	0.00	0.00	0.50	0.13	0.00	0.05	0.12
Pentachloro	1.08	0.00	0.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4'-OH-PCB 165	1.09	0.73	0.84	0.00	0.00	0.65	0.00	0.00	0.00	0.00
4-OH-PCB 146	1.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pentachloro	1.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hexachloro	1.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hexachloro	1.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3'-OH-PCB 138	1.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4'-OH-PCB 130	1.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4'-OH-PCB 106	1.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Heptachloro	1.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Heptachloro	1.16	0.00	0.00	0.00	0.00	0.60	0.00	0.00	0.00	0.00
Heptachloro	1.17	0.00	0.00	0.00	0.00	0.62	0.00	0.00	0.00	0.00
Pentachloro	1.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hexachloro	1.19	0.00	0.00	0.00	16.10	16.63	0.00	18.81	0.00	0.00
13C-4-OH-PCB 187	1.19									
4-OH-PCB 187	1.19	0.00	0.00	0.00	0.59	0.66	1.27	1.54	0.00	2.27
Pentachloro	1.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Heptachloro	1.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4'-OH-PCB 159 + 4'-OH-PCB 11	1.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4-OH-PCB 202	1.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pentachloro	1.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Octachloro	1.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Heptachloro	1.24	0.00	0.25	0.24	0.00	0.20	0.00	0.00	0.00	0.00
Heptachloro	1.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Heptachloro	1.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3'-OH-PCB 180	1.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4'-OH-PCB 172	1.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nonachloro	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37
Heptachloro	1.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4-OH-PCB 193	1.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Heptachloro	1.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Heptachloro	1.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nonachloro	1.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4,4'-di-OH-PCB 202	1.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4'-OH-PCB 208	1.43	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nonachloro	1.43	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.00



Supporting Information 7 OH-PCB concentrations and relative retention time (RRT) in water and suspended solid collected from southern Ontario, Canada

Compound Name	RRT	Peche Island, Detroit River, Column 2	Fright I (DF30), Detroit R, Column 1	Lake Erie (D44), Detroit RM, Column 1	Amherst Island, Detroit River, Column 1	Hamilton Harbour Burlington STP, Column 2	Hamilton Harbour Stelco Factory, Column 2	Ashbridges Bay STP Offshore, Column 1	Ashbridges Bay STP Nearshore, Column 1	Lake Ontario Offshore STN 206	Ontario B1+2	Hamilton B1+2	Lake Ontario SS 1+2	Hamilton SS 1+2+3
		W1b	W2a	W3a	W4a	W5b	W6b	W7a	W8a	W11	pg/L	pg/L	pg/L	pg/g POC
PCP	0.41	1861	1872	849	1578	2903	3144	21.8	0.0	19.4	0.9	16.5	1025	21363
Monochloro	0.42	0.00	0.00	0.00	0.00	0.00	0.09	0.10	0.00	0.06	0.00	0.00	0.00	24.81
6-OH-PCB 2	0.42	0.04	3.05	1.80	0.13	1.87	0.19	0.00	5.64	0.00	0.12	14.28	0.00	0.00
Monochloro	0.43	0.00	0.14	0.11	0.00	0.06	0.01	0.00	0.00	0.03	0.00	0.00	0.00	0.00
4-OH-PCB 1	0.44	0.00	0.07	0.04	0.00	0.00	0.00	0.01	0.03	0.01	0.00	0.07	0.00	0.00
Dichloro	0.44	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Monochloro	0.45	0.00	0.14	0.15	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Monochloro	0.45	0.01	0.00	0.00	0.01	0.00	0.01	0.00	0.95	0.00	0.00	0.00	0.00	0.00
Dichloro	0.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44	0.00	0.00	0.00	0.00	0.00
Dichloro	0.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.66	0.00	0.00	0.00	0.00	0.00
Monochloro	0.48	0.00	0.00	0.00	0.01	1.21	0.08	0.00	0.00	0.16	0.00	0.00	0.00	0.00
2'-OH-PCB 9	0.48	0.01	0.00	0.00	0.00	0.01	0.00	0.00	4.99	0.00	0.00	5.60	0.00	0.00
Monochloro	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dichloro	0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Monochloro	0.49	0.00	0.00	0.00	0.20	2.64	0.60	0.00	11.00	0.04	0.00	0.03	0.00	0.00
Monochloro	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dichloro	0.50	0.00	0.00	0.00	2.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2'-OH-PCB 5	0.51	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00
4-OH-PCB 2	0.51	0.01	0.45	0.33	0.02	0.08	0.02	0.08	2.01	0.04	0.05	0.00	0.00	0.00
Dichloro	0.51	0.00	0.28	0.00	0.00	0.14	0.11	0.00	8.73	0.00	0.00	0.59	0.00	0.00
Monochloro	0.52	0.04	0.00	0.00	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dichloro	0.53	0.00	0.00	0.00	0.00	0.31	0.29	0.00	0.08	0.05	0.00	0.00	0.00	0.00
Dichloro	0.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.33	0.00	0.00
Monochloro	0.53	0.00	0.00	0.00	0.02	0.45	0.07	0.00	0.00	0.00	0.00	3.60	0.00	0.00
Dichloro	0.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.54	0.13	0.00	0.38	0.00	0.00
Dichloro	0.54	0.00	0.00	0.00	0.00	0.08	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dichloro	0.54	0.00	1.11	0.00	0.00	0.00	0.00	0.11	17.11	0.11	0.00	1.15	0.00	0.00
Dichloro	0.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.66	0.00	0.00	0.00	0.00	0.00
2'-OH-PCB 30	0.55	0.00	0.00	0.07	0.00	0.00	0.00	0.02	0.00	0.18	0.00	0.02	0.00	0.00
3'-OH-PCB 9	0.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dichloro	0.56	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dichloro	0.56	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dichloro	0.57	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4-OH-PCB 14	0.57	0.02	1.15	1.08	0.02	0.14	0.09	0.99	2.29	1.03	0.05	0.14	0.00	0.00
Dichloro	0.58	0.06	0.00	0.00	0.09	0.56	0.12	0.00	0.00	0.00	0.00	0.17	0.00	0.00
Dichloro	0.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.04	0.00	0.00	0.00	0.00	0.00
4'-OH-PCB 9	0.58	0.00	0.12	0.08	0.00	0.03	0.05	0.00	0.21	0.00	0.00	0.58	0.00	0.00
2'-OH-PCB 12	0.59	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trichloro	0.59	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dichloro	0.59	0.23	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trichloro	0.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.58	0.00	0.00	0.00	0.00	0.00
Dichloro	0.59	0.00	0.00	0.00	0.00	0.04	0.04	0.00	1.31	0.00	0.00	0.00	0.00	0.00
Dichloro	0.60	0.00	0.00	0.00	0.02	0.22	0.23	0.00	26.56	0.00	0.00	0.00	0.00	0.00
Dichloro	0.60	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.53	0.00	0.00
Dichloro	0.61	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.16	0.00	0.00
Trichloro	0.61	0.00	0.03	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dichloro	0.62	0.00	0.00	0.48	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dichloro	0.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.58	0.00	0.00	0.00	0.00	0.00
3'-OH-PCB 30	0.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	83.20
Dichloro	0.63	0.04	0.20	0.45	0.03	0.00	0.00	0.00	1.83	0.00	0.00	0.00	0.00	0.00
Dichloro	0.63	0.11	0.34	0.68	0.05	0.00	0.00	0.00	3.36	0.00	0.00	0.00	0.00	0.00
Dichloro	0.64	0.02	0.21	0.29	0.01	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dichloro	0.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.07	0.26	0.00	0.00	0.00	0.00
Trichloro	0.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.85	0.00	0.00	0.00	0.00	0.00
Dichloro	0.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.62	0.00	0.00	0.00	0.00	0.00
6'-OH-PCB 26	0.65	0.00	0.14	0.12	0.00	0.00	0.01	0.11	0.08	0.07	0.00	0.01	0.00	0.00
Dichloro	0.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trichloro	0.65	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4'-OH-PCB 30	0.66	0.00	0.03	0.06	0.00	0.02	0.00	0.00	0.07	0.00	0.00	0.33	0.00	0.00
Trichloro	0.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.00	0.00
Dichloro	0.66	0.00	0.00	0.00	0.00	0.05	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4'-OH-PCB 18	0.67	0.00	0.13	0.11	0.00	0.07	0.07	0.04	0.21	0.07	0.00	0.35	0.00	0.00
Trichloro	0.67	0.00	0.00	0.00	0.00	0.14	0.08	0.00	0.54	0.10	0.00	0.30	0.00	0.00
Trichloro	0.68	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.33	0.00	0.00	0.25	0.00	0.00
Trichloro	0.68	0.00	0.11	0.00	0.00	0.06	0.07	0.00	0.43	0.00	0.00	0.00	0.00	0.00
Trichloro	0.69	0.00	0.00	0.00	0.00	0.06	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dichloro	0.69	0.05	0.80	0.84	0.08	0.13	0.06	0.40	0.00	0.00	0.00	0.09	0.00	0.00
Dichloro	0.69	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.90	0.90	0.00	0.00	0.00	0.00
13C 4'-OH-PCB 12	0.69													
Dichloro	0.70	0.00	0.00	0.00	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.06	0.00	0.00
Trichloro	0.70	0.00	0.00	0.00	0.00	0.05	0.02	0.00	0.00	0.15	0.00	0.15	0.00	0.00
Trichloro	0.71	0.00	0.00	0.00	0.00	0.05	0.04	0.00	0.27	0.00	0.00	0.00	0.00	0.00
Trichloro	0.72	0.00	0.00	0.00	0.00	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6'-OH-PCB 69	0.72	0.00	0.05	0.08	0.00	0.00	0.00	0.01	0.00	0.04	0.00	0.05	0.00	0.00
Tetrachloro	0.73	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00



4'-OH-PCB 97	1.07	-	-	-	-	-	-	-	-	-	0.00	0.09	0.00	0.00
4-OH-PCB 134	1.07	-	-	-	-	-	-	-	-	-	0.00	0.11	0.00	16.62
Pentachloro	1.08	0.01	0.19	0.00	0.00	0.02	0.03	0.08	0.00	0.12	0.00	0.11	0.00	0.00
Hexachloro	1.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00
3'-OH-PCB 184	1.08	-	-	-	-	-	-	-	-	-	0.00	0.00	0.00	10.68
4'-OH-PCB 165	1.09	0.00	0.13	0.08	0.00	0.03	0.02	0.01	0.11	0.00	0.00	0.04	0.00	0.00
Pentachloro	1.09	0.01	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pentachloro	1.09	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4-OH-PCB 146	1.09	0.00	0.04	0.03	0.00	0.03	0.00	0.04	0.42	0.00	0.00	0.03	0.00	0.00
Tetrachloro	1.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hexachloro	1.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
Hexachloro	1.10	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pentachloro	1.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hexachloro	1.11	0.00	0.00	0.00	0.00	0.02	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pentachloro	1.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hexachloro	1.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pentachloro	1.13	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4'-OH-PCB 127	1.13	-	-	-	-	-	-	-	-	-	0.00	0.05	0.00	0.00
Hexachloro	1.13	0.00	0.00	0.00	0.00	0.03	0.04	0.00	0.00	0.00	0.00	0.22	0.00	40.04
3'-OH-PCB 138	1.15	0.00	0.03	0.04	0.00	0.01	0.00	0.17	0.32	0.10	0.00	0.18	0.00	0.00
4'-OH-PCB 130	1.15	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.25	0.00	0.03	0.00	0.00
4'-OH-PCB 106	1.16	0.00	0.15	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.02	0.00	0.00
Heptachloro	1.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.91	0.00	0.00	0.00	0.00
4-OH-PCB 163	1.17	-	-	-	-	-	-	-	-	-	0.00	0.00	246.9	0.00
Pentachloro	1.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4-OH-PCB 178	1.18	-	-	-	-	-	-	-	-	-	0.00	0.00	0.00	0.00
3'-OH-PCB 182 + 3'-OH-13C-4-OH-PCB 187	1.18	-	-	-	-	-	-	-	-	-	0.00	0.00	0.00	0.00
4-OH-PCB 187	1.19	0.01	0.49	0.00	0.02	0.02	0.01	0.96	0.34	0.84	0.51	0.00	0.00	0.00
Pentachloro	1.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.01	0.00	0.00	98.47	0.00
Heptachloro	1.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.00	0.00	0.00	0.00
4'-OH-PCB 159 + 4'-OH-	1.20	0.03	0.14	0.14	0.00	0.02	0.01	0.00	0.07	0.12	0.00	0.01	0.00	0.00
Pentachloro	1.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.66	0.47	0.00	0.00	0.00	0.00
Hexachloro	1.21	0.01	-	-	0.00	0.00	0.00	0.00	-	-	0.00	0.00	0.00	0.00
4-OH-PCB 162	1.22	-	-	-	-	-	-	-	-	-	0.00	0.00	0.00	0.00
Heptachloro	1.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Octachloro	1.24	0.00	2.58	0.00	0.00	0.00	0.00	0.00	15.20	0.79	0.00	0.00	0.00	0.00
4-OH-PCB 202	1.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4-OH-PCB 177	1.25	-	-	-	-	-	-	-	-	-	0.00	0.00	0.00	0.00
Heptachloro	1.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46	0.00	0.00	0.00	0.00
4'-OH-PCB 201	1.27	-	-	-	-	-	-	-	-	-	0.00	0.00	0.00	0.00
Heptachloro	1.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.00	0.00	0.00	0.00
3'-OH-PCB 180	1.28	0.00	0.03	0.02	0.00	0.00	0.01	0.15	0.01	0.00	0.00	0.00	0.00	0.00
4'-OH-PCB 172	1.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Heptachloro	1.29	0.00	0.00	0.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Heptachloro	1.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nona - unidentified	1.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.29
4-OH-PCB 193	1.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00
Heptachloro	1.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Heptachloro	1.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.56	0.00	0.00	0.00	0.00	0.00
Heptachloro	1.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.58	0.00	0.00	0.00	0.00	0.00
3'-OH-PCB 203	1.37	-	-	-	-	-	-	-	-	-	0.00	0.01	0.00	0.00
4'-OH-PCB 198	1.37	-	-	-	-	-	-	-	-	-	0.00	0.01	0.00	0.00
4'-OH-PCB 199	1.38	-	-	-	-	-	-	-	-	-	0.00	0.01	0.00	0.00
Heptachloro	1.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Octachloro	1.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nonachloro	1.40	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00
4'-OH-PCB 200	1.40	-	-	-	-	-	-	-	-	-	0.00	0.01	66.84	0.00
4,4'-di-OH-PCB 202	1.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00
4'-OH-PCB 208	1.43	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nonachloro	1.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.30	0.00	0.00		