

## Appendix E      Concentrations of PCBs in New Zealand air

This appendix reports the concentrations of PCBs in air samples collected as part of the Organochlorines Programme. Results from field quality control samples are also provided.

Concentrations of 25 PCB congeners are reported. PCB TEQ levels were calculated, both excluding LOD values and including half LOD values, using the WHO TEFs (Ahlborg *et al.*, 1994).

PCB data are reported in the following tables:

Table E1	Concentrations in Baring Head air
Table E2	Concentrations in Nelson Lakes National Park air
Table E3	Concentrations in Te Wera air
Table E4	Concentrations in Culverden air
Table E5	Concentrations in Hamilton air
Table E6	Concentrations in Masterton air
Table E7	Concentrations in Greymouth air
Table E8	Concentrations in Christchurch air
Table E9	Concentrations in Auckland City air
Table E10	Concentrations in Auckland South air
Table E11	Comparative concentrations in primary and collocated samples
Table E12	Results of field and equipment rinsate blanks

**Table E1 Concentrations of PCBs in Baring Head air (pg m<sup>-3</sup>)<sup>1</sup>**

Congener	AR-06-1 (03/05/96 to 23/05/96)	AR-06-2 (09/07/96 to 29/07/96)	AR-06-3 (18/09/96 to 11/10/96)	AR-06-4 (27/11/96 to 17/12/96)	AR-06-5 (04/02/97 to 06/03/97)	AR-06-6 (06/05/97 to 27/05/97)	Number of positives	Minimum	Maximum <sup>4</sup>	Median	Mean <sup>5,6</sup>	Mean of <sup>13</sup> C surrogate standard recoveries, %, (n=6)
PCB #77	0.048	< 0.04	< 0.02	0.090	0.023	0.034	4	< 0.02	0.090	0.029	0.038	81
PCB #126	< 0.01	0.026	< 0.03	< 0.06	< 0.02	< 0.02	1	< 0.01	0.026	< 0.03	-	64
PCB #169	< 0.02	< 0.007	< 0.06	< 0.06	< 0.02	< 0.03	0	< 0.007	< 0.06	< 0.03	-	62
PCB #28 + PCB #31	11.3	4.72	4.87	6.35	7.86	6.83	6	4.72	11.3	6.59	6.99	84
PCB #52	2.09	0.75	0.90	1.32	1.43	1.70	6	0.75	2.09	1.38	1.37	89
PCB #101	1.44	0.41	0.51	0.93	0.71	2.07	6	0.41	2.07	0.82	1.01	96
PCB #99	0.41	< 0.09	0.10	0.20	0.18	0.26	5	< 0.09	0.41	0.19	0.20	
PCB #123	0.043	< 0.01	< 0.04	< 0.06	< 0.04	< 0.07	1	< 0.01	0.043	< 0.05	-	
PCB #118	0.62	0.19	0.23	0.25	0.24	0.70	6	0.19	0.70	0.25	0.37	
PCB #114	< 0.02	< 0.01	< 0.01	< 0.08	< 0.04	< 0.04	0	< 0.01	< 0.08	< 0.03	-	
PCB #105	0.15	0.041	0.049	0.10	0.051	0.11	6	0.041	0.15	0.076	0.084	
PCB #153	0.59	0.21	0.24	0.40	0.32	0.95	6	0.21	0.95	0.36	0.45	85
PCB #138	0.73	0.24	0.33	0.43	0.47	1.18	6	0.24	1.18	0.45	0.56	
PCB #167	< 0.08	< 0.02	< 0.03	< 0.09	< 0.06	< 0.1	0	< 0.02	< 0.1	< 0.07	-	
PCB #156	< 0.04	< 0.02	< 0.02	< 0.07	< 0.06	< 0.09	0	< 0.02	< 0.09	< 0.05	-	
PCB #157	< 0.03	< 0.02	< 0.01	< 0.08	< 0.06	< 0.02	0	< 0.01	< 0.08	< 0.03	-	
PCB #187	0.29	0.16	0.083	0.11	0.093	0.22	6	0.083	0.29	0.14	0.16	
PCB #183	< 0.2	< 0.06	< 0.04	< 0.08	< 0.04	< 0.2	0	< 0.04	< 0.2	< 0.07	-	
PCB #180	0.10	< 0.04	< 0.04	0.082	0.060	0.11	4	< 0.04	0.11	0.071	0.065	79
PCB #170	< 0.1	< 0.03	< 0.03	< 0.1	< 0.05	< 0.1	0	< 0.03	< 0.1	< 0.08	-	
PCB #189	< 0.05	< 0.02	< 0.02	< 0.1	< 0.02	< 0.04	0	< 0.02	< 0.1	< 0.03	-	
PCB #202	< 0.09	< 0.04	< 0.01	< 0.02	< 0.03	< 0.02	0	< 0.01	< 0.09	< 0.03	-	98
PCB #194	< 0.06	< 0.02	< 0.02	< 0.05	< 0.02	< 0.03	0	< 0.02	< 0.06	< 0.03	-	
PCB #206	< 0.1	< 0.04	< 0.04	< 0.05	< 0.02	< 0.05	0	< 0.02	< 0.1	< 0.05	-	
Sum of PCBs (inc) <sup>2</sup>	18.2	6.98	7.52	10.7	11.7	14.6		6.98	18.2	11.2	11.6	
Sum of PCBs (exc) <sup>3</sup>	17.8	6.75	7.31	10.3	11.4	14.2		6.75	17.8	10.9	11.3	
Total PCB TEQ (inc) <sup>1,2</sup>	0.74	2.68	1.85	3.45	1.19	1.30		0.74	3.45	1.58	1.87	
Total PCB TEQ (exc) <sup>1,3</sup>	0.11	2.62	0.028	0.081	0.041	0.10		0.028	2.62	0.091	0.50	

1 = Total PCB TEQ data reported in fg m<sup>-3</sup>. All other results in pg m<sup>-3</sup>.

2 = Including half LOD values.

3 = Excluding LOD values.

4 = Excludes any LOD value which is greater than a maximum measured value.

5 = Mean value reported only if a PCB congener detected on more than 66% of occasions (minimum of 4 positive determinations).

6 = For any individual congener, calculation of the mean includes half LOD values.

**Table E2 Concentrations of PCBs in Nelson Lakes National Park air (pg m<sup>-3</sup>)<sup>1</sup>**

Congener	AR-07-1 (22/03/96 to 11/04/96)	AR-07-2 (24/05/96 to 13/06/96)	AR-07-3 (09/10/96 to 29/10/96)	AR-07-5 (03/01/97 to 23/01/97)	Number of positives	Minimum	Maximum	Median	Mean <sup>4,5</sup>	Mean of <sup>13</sup> C surrogate standard recoveries, %, (n=4)
PCB #77	< 0.02	0.014	0.078	0.031	3	< 0.02	0.078	0.023	0.033	81
PCB #126	< 0.01	< 0.01	< 0.006	< 0.009	0	< 0.006	< 0.01	< 0.01	-	69
PCB #169	< 0.02	< 0.004	< 0.003	< 0.005	0	< 0.003	< 0.02	< 0.005	-	81
PCB #28 + PCB #31	9.00	3.97	4.55	6.04	4	3.97	9.00	5.30	5.89	78
PCB #52	1.98	0.58	1.15	0.89	4	0.58	1.98	1.02	1.15	94
PCB #101	0.67	0.34	3.63	0.72	4	0.34	3.63	0.70	1.34	109
PCB #99	0.15	0.11	1.16	0.22	4	0.11	1.16	0.19	0.41	
PCB #123	< 0.02	< 0.01	< 0.07	< 0.02	0	< 0.01	< 0.07	< 0.02	-	
PCB #118	0.32	0.14	1.35	0.55	4	0.14	1.35	0.44	0.59	
PCB #114	< 0.01	< 0.01	< 0.03	< 0.02	0	< 0.01	< 0.03	< 0.02	-	
PCB #105	0.065	0.029	0.28	0.12	4	0.029	0.28	0.093	0.12	
PCB #153	0.44	0.15	0.54	0.29	4	0.15	0.54	0.37	0.36	79
PCB #138	0.75	0.22	0.76	0.47	4	0.22	0.76	0.61	0.55	
PCB #167	0.065	< 0.02	0.064	0.047	3	< 0.02	0.065	0.056	0.047	
PCB #156	< 0.02	< 0.01	< 0.02	< 0.02	0	< 0.01	< 0.02	< 0.02	-	
PCB #157	< 0.02	< 0.01	< 0.01	< 0.02	0	< 0.01	< 0.02	< 0.02	-	
PCB #187	0.19	0.059	0.053	0.050	4	0.050	0.19	0.056	0.088	
PCB #183	0.078	< 0.04	< 0.03	< 0.02	1	< 0.02	0.078	< 0.04	-	
PCB #180	0.070	0.020	< 0.04	0.035	3	< 0.04	0.070	0.028	0.036	84
PCB #170	< 0.03	< 0.02	< 0.01	< 0.03	0	< 0.01	< 0.03	< 0.03	-	
PCB #189	< 0.02	< 0.01	< 0.01	< 0.01	0	< 0.01	< 0.02	< 0.01	-	
PCB #202	< 0.01	< 0.01	< 0.01	< 0.01	0	< 0.01	< 0.01	< 0.01	-	107
PCB #194	< 0.01	< 0.01	< 0.01	< 0.01	0	< 0.01	< 0.01	< 0.01	-	
PCB #206	< 0.01	< 0.02	< 0.01	< 0.01	0	< 0.01	< 0.02	< 0.01	-	
Sum of PCBs (inc) <sup>2</sup>	13.9	5.72	13.7	9.56		5.72	13.9	11.6	10.7	
Sum of PCBs (exc) <sup>3</sup>	13.8	5.63	13.6	9.46		5.63	13.8	11.5	10.6	
Total PCB TEQ (inc) <sup>1,2</sup>	0.66	0.55	0.54	0.58		0.54	0.66	0.57	0.58	
Total PCB TEQ (exc) <sup>1,3</sup>	0.040	0.024	0.20	0.083		0.024	0.20	0.062	0.087	

1 = Total PCB TEQ data reported in fg m<sup>-3</sup>. All other results in pg m<sup>-3</sup>.

2 = Including half LOD values.

3 = Excluding LOD values.

4 = Mean value reported only if a PCB congener detected on more than 66% of occasions (minimum of 3 positive determinations).

5 = For any individual congener, calculation of the mean includes half LOD values.

**Table E3 Concentrations of PCBs in Te Wera air (pg m<sup>-3</sup>)<sup>1</sup>**

Congener	AR-04-1 (26/04/96 to 16/05/96)	AR-04-2 (26/06/96 to 15/07/96)	AR-04-3 (16/08/96 to 06/09/96)	AR-04-5 (20/02/97 to 13/03/97)	AR-04-6 (25/03/97 to 09/04/97)	Number of positives	Minimum	Maximum <sup>4</sup>	Median	Mean <sup>5,6</sup>	Mean of <sup>13</sup> C surrogate standard recoveries, %, (n=5)
PCB #77	0.024	0.016	0.044	1.26	0.35	5	0.016	1.26	0.044	0.34	79
PCB #126	< 0.002	< 0.008	< 0.01	< 0.02	< 0.02	0	< 0.002	< 0.02	< 0.01	-	65
PCB #169	< 0.005	< 0.003	< 0.004	< 0.005	< 0.006	0	< 0.003	< 0.006	< 0.005	-	79
PCB #28 + PCB #31	9.14	3.15	3.29	5.60	7.48	5	3.15	9.14	5.60	5.73	64
PCB #52	1.51	0.57	0.82	1.35	1.61	5	0.57	1.61	1.35	1.17	80
PCB #101	0.45	0.38	0.93	2.82	3.88	5	0.38	3.88	0.93	1.69	94
PCB #99	0.10	0.086	0.16	0.47	0.47	5	0.086	0.47	0.16	0.26	
PCB #123	< 0.01	< 0.01	< 0.04	0.14	0.18	2	< 0.01	0.18	< 0.04	-	
PCB #118	0.14	0.14	0.31	1.14	1.62	5	0.14	1.62	0.31	0.67	
PCB #114	< 0.01	< 0.01	< 0.01	< 0.03	< 0.04	0	< 0.01	< 0.04	< 0.01	-	
PCB #105	0.028	0.031	0.067	0.21	0.23	5	0.028	0.23	0.067	0.11	
PCB #153	0.27	0.15	0.47	1.99	4.33	5	0.15	4.33	0.47	1.44	75
PCB #138	0.29	0.24	0.60	2.83	6.03	5	0.24	6.03	0.60	2.00	
PCB #167	0.021	0.020	0.036	0.22	0.45	5	0.020	0.45	0.036	0.15	
PCB #156	< 0.01	< 0.01	0.016	0.077	0.18	3	< 0.01	0.18	0.016	-	
PCB #157	< 0.01	< 0.01	< 0.01	< 0.02	< 0.02	0	< 0.01	< 0.02	< 0.01	-	
PCB #187	0.17	0.060	0.10	0.56	1.24	5	0.060	1.24	0.17	0.43	
PCB #183	0.072	0.031	0.034	0.27	0.65	5	0.031	0.65	0.072	0.21	
PCB #180	0.062	0.058	0.051	0.32	0.75	5	0.051	0.75	0.062	0.25	79
PCB #170	< 0.04	0.094	0.033	0.19	0.42	4	< 0.04	0.42	0.094	0.15	
PCB #189	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0	< 0.01	< 0.01	< 0.01	-	
PCB #202	0.025	< 0.02	< 0.01	< 0.02	< 0.04	1	< 0.01	0.025	< 0.02	-	96
PCB #194	< 0.01	< 0.02	< 0.01	< 0.02	< 0.02	0	< 0.01	< 0.02	< 0.02	-	
PCB #206	< 0.02	< 0.02	< 0.01	< 0.02	< 0.02	0	< 0.01	< 0.02	< 0.02	-	
Sum of PCBs (inc) <sup>2</sup>	12.4	5.09	7.02	19.5	30.0		5.09	30.0	12.4	14.8	
Sum of PCBs (exc) <sup>3</sup>	12.3	5.03	6.96	19.4	29.9		5.03	29.9	12.3	14.7	
Total PCB TEQ (inc) <sup>1,2</sup>	0.17	0.46	0.60	1.88	1.57		0.17	1.88	0.60	0.94	
Total PCB TEQ (exc) <sup>1,3</sup>	0.030	0.035	0.072	0.84	0.52		0.030	0.84	0.072	0.30	

1 = Total PCB TEQ data reported in fg m<sup>-3</sup>. All other results in pg m<sup>-3</sup>.

2 = Including half LOD values.

3 = Excluding LOD values.

4 = Excludes any LOD value which is greater than a maximum measured value.

5 = Mean value reported only if a PCB congener detected on more than 66% of occasions (minimum of 4 positive determinations).

6 = For any individual congener, calculation of the mean includes half LOD values.

**Table E4 Concentrations of PCBs in Culverden air (pg m<sup>-3</sup>)<sup>1</sup>**

Congener	AR-10-1 (15/03/96 to 04/04/96)	AR-10-2 (20/05/96 to 10/06/96)	AR-10-3 (18/07/96 to 09/08/96)	AR-10-4 (12/09/96 to 02/10/96)	AR-10-5 (18/12/96 to 07/01/97)	AR-10-6 (13/02/97 to 05/03/97)	Number of positives	Minimum	Maximum <sup>4</sup>	Median	Mean <sup>5,6</sup>	Mean of <sup>13</sup> C surrogate standard recoveries, %, (n=6)
PCB #77	< 0.04	0.021	0.015	0.020	0.018	1.61	5	< 0.04	1.61	0.021	0.28	85
PCB #126	< 0.007	< 0.001	< 0.006	< 0.008	< 0.02	< 0.01	0	< 0.001	< 0.02	< 0.008	-	68
PCB #169	< 0.002	< 0.002	< 0.005	< 0.004	< 0.007	< 0.007	0	< 0.002	< 0.007	< 0.005	-	72
PCB #28 + PCB #31	9.76	6.51	3.06	6.52	6.90	9.07	6	3.06	9.76	6.71	6.97	63
PCB #52	1.55	1.00	0.77	1.38	1.16	1.56	6	0.77	1.56	1.27	1.24	88
PCB #101	0.60	0.53	0.43	0.75	0.58	0.88	6	0.43	0.88	0.59	0.63	108
PCB #99	0.13	0.13	0.10	0.18	0.13	0.18	6	0.10	0.18	0.13	0.14	
PCB #123	< 0.03	0.017	< 0.02	< 0.02	< 0.02	< 0.03	1	< 0.02	0.017	< 0.02	-	
PCB #118	0.36	0.17	0.13	0.18	0.15	0.25	6	0.13	0.36	0.18	0.21	
PCB #114	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0	< 0.01	< 0.01	< 0.01	-	
PCB #105	0.074	0.038	< 0.03	< 0.04	0.030	0.044	4	< 0.03	0.074	0.030	0.037	
PCB #153	0.38	0.22	0.15	0.18	0.20	0.27	6	0.15	0.38	0.21	0.23	76
PCB #138	0.52	0.30	0.18	0.22	0.22	0.39	6	0.18	0.52	0.26	0.31	
PCB #167	0.030	0.021	< 0.02	< 0.02	< 0.02	< 0.03	2	< 0.02	0.030	0.016	-	
PCB #156	< 0.01	0.016	< 0.01	< 0.01	< 0.01	< 0.01	1	< 0.01	0.016	< 0.01	-	
PCB #157	< 0.02	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0	< 0.01	< 0.02	< 0.01	-	
PCB #187	0.20	0.089	0.048	0.051	0.057	0.085	6	0.048	0.20	0.071	0.088	
PCB #183	0.057	0.032	< 0.02	< 0.03	< 0.03	< 0.03	2	< 0.02	0.057	< 0.03	-	
PCB #180	0.067	0.030	< 0.02	< 0.03	0.038	0.053	4	< 0.02	0.067	0.027	0.036	74
PCB #170	< 0.04	0.035	< 0.02	< 0.01	< 0.04	< 0.04	1	< 0.01	0.035	0.029	-	
PCB #189	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0	< 0.01	< 0.01	< 0.01	-	
PCB #202	< 0.02	< 0.02	< 0.01	< 0.01	< 0.02	< 0.01	0	< 0.01	< 0.02	< 0.02	-	97
PCB #194	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0	< 0.01	< 0.01	< 0.01	-	
PCB #206	< 0.01	< 0.02	< 0.01	< 0.01	< 0.02	< 0.01	0	< 0.01	< 0.02	< 0.01	-	
Sum of PCBs (inc) <sup>2</sup>	13.8	9.20	4.99	9.60	9.60	14.5		4.99	14.5	9.60	10.3	
Sum of PCBs (exc) <sup>3</sup>	13.7	9.16	4.88	9.48	9.48	14.4		4.88	14.4	9.48	10.2	
Total PCB TEQ (inc) <sup>1,2</sup>	0.43	0.11	0.36	0.46	1.07	1.38		0.11	1.38	0.45	0.64	
Total PCB TEQ (exc) <sup>1,3</sup>	0.044	0.045	0.021	0.028	0.027	0.83		0.021	0.83	0.036	0.17	

1 = Total PCB TEQ data reported in fg m<sup>-3</sup>. All other results in pg m<sup>-3</sup>.

2 = Including half LOD values.

3 = Excluding LOD values.

4 = Excludes any LOD value which is greater than a maximum measured value.

5 = Mean value reported only if a PCB congener detected on more than 66% of occasions (minimum of 4 positive determinations).

6 = For any individual congener, calculation of the mean includes half LOD values.

**Table E5 Concentrations of PCBs in Hamilton air ( $\mu\text{g m}^{-3}$ )<sup>1</sup>**

Congener	AR-03-2/AR-03-2 CS (n=2) <sup>4</sup> (31/05/96 to 20/06/96)	AR-03-3 (19/07/96 to 08/08/96)	AR-03-4/AR-03-4 CS (n=2) <sup>4</sup> (17/09/96 to 10/10/96)	AR-03-5 (15/11/96 to 05/12/96)	AR-03-6 (20/01/97 to 10/02/97)	AR-03-7 (14/03/97 to 03/04/97)	Number of positives	Minimum	Maximum	Median <sup>5</sup>	Mean <sup>6,7</sup>	Mean of <sup>13</sup> C surrogate standard recoveries, %, (n=8)
PCB #77	0.19	0.16	0.14	0.23	0.40	0.51	6	0.14	0.51	0.21	0.27	89
PCB #126	0.058	< 0.02	< 0.02	< 0.02	0.12	0.056	3	< 0.02	0.12	0.033	-	65
PCB #169	< 0.03	< 0.006	< 0.007	< 0.008	< 0.01	< 0.007	0	< 0.006	< 0.03	< 0.008	-	86
PCB #28 + PCB #31	17.0	23.9	25.1	36.5	35.6	35.6	6	17.0	36.5	30.3	28.9	59
PCB #52	6.21	7.92	8.88	13.9	25.1	11.5	6	6.21	25.1	10.2	12.3	74
PCB #101	6.29	7.80	8.69	14.8	17.0	15.9	6	6.29	17.0	11.7	11.7	97
PCB #99	1.37	1.78	2.05	3.20	4.18	3.94	6	1.37	4.18	2.63	2.75	
PCB #123	0.099	< 0.2	< 0.2	0.31	0.19	0.22	4	< 0.2	0.31	0.14	0.17	
PCB #118	1.60	1.83	1.86	3.84	4.86	4.43	6	1.60	4.86	2.85	3.07	
PCB #114	< 0.03	< 0.05	< 0.05	0.074	0.11	0.080	3	< 0.03	0.11	0.050	-	
PCB #105	0.36	0.39	0.43	0.74	1.07	1.14	6	0.36	1.14	0.59	0.69	
PCB #153	2.20	1.79	1.82	2.87	4.23	4.22	6	1.79	4.23	2.54	2.86	79
PCB #138	3.42	2.62	2.64	4.31	6.62	7.47	6	2.62	7.47	3.87	4.51	
PCB #167	0.37	0.22	0.24	0.32	0.53	0.70	6	0.22	0.70	0.35	0.40	
PCB #156	0.20	0.076	0.074	0.090	0.17	0.24	6	0.074	0.24	0.13	0.14	
PCB #157	< 0.05	< 0.02	< 0.02	< 0.03	0.045	0.050	2	< 0.02	0.050	< 0.04	-	
PCB #187	0.56	0.36	0.37	0.97	0.86	0.80	6	0.36	0.97	0.68	0.65	
PCB #183	0.26	0.16	0.17	0.37	0.33	0.35	6	0.16	0.37	0.30	0.27	
PCB #180	0.63	0.25	0.23	0.44	0.48	0.58	6	0.23	0.63	0.46	0.44	97
PCB #170	0.66	0.18	0.18	0.20	0.41	0.49	6	0.18	0.66	0.31	0.35	
PCB #189	< 0.04	< 0.02	< 0.01	< 0.02	< 0.05	< 0.01	0	< 0.01	< 0.05	< 0.02	-	
PCB #202	< 0.05	< 0.03	< 0.04	0.14	< 0.03	< 0.03	1	< 0.03	0.14	< 0.04	-	103
PCB #194	0.11	< 0.03	< 0.02	0.13	< 0.05	< 0.05	2	< 0.02	0.13	< 0.05	-	
PCB #206	< 0.06	< 0.03	< 0.03	0.15	< 0.03	< 0.02	1	< 0.02	0.15	< 0.03	-	
Sum of PCBs (inc) <sup>2</sup>	41.6	49.6	53.0	83.6	102	88.3		41.6	102	68.3	69.7	
Sum of PCBs (exc) <sup>3</sup>	41.5	49.4	52.8	83.6	102	88.3		41.5	102	68.2	69.6	
Total PCB TEQ (inc) <sup>1,2</sup>	6.37	1.42	1.42	1.76	13.1	6.72		1.42	13.1	4.07	5.13	
Total PCB TEQ (exc) <sup>1,3</sup>	6.22	0.36	0.36	0.71	13.0	6.68		0.36	13.0	3.47	4.56	

1 = Total PCB TEQ data reported in  $\text{fg m}^{-3}$ . All other results in  $\text{pg m}^{-3}$ .

2 = Including half LOD values.

3 = Excluding LOD values.

4 = Mean of collocated samples.

5 = For any individual congener, calculation of the median includes half LOD values.

6 = Mean value reported only if a PCB congener detected on more than 66% of occasions (minimum of 4 positive determinations).

7 = For any individual congener, calculation of the mean includes half LOD values.

**Table E6 Concentrations of PCBs in Masterton air (pg m<sup>-3</sup>)<sup>1</sup>**

Congener	AR-05-1 (21/03/96 to 11/04/96)	AR-05-3 (13/08/96 to 02/09/96)	AR-05-4 (11/10/96 to 21/11/98)	AR-05-5 (23/12/96 to 22/01/97)	AR-05-6 (14/03/97 to 15/04/97)	Number of positives	Minimum	Maximum <sup>4</sup>	Median	Mean <sup>5</sup>	Mean of <sup>13</sup> C surrogate standard recoveries, %, (n=5)
PCB #77	0.15	0.16	0.12	0.17	0.12	5	0.12	0.17	0.15	0.14	72
PCB #126	< 0.02	0.065	< 0.02	< 0.02	< 0.02	1	< 0.02	0.065	< 0.02	-	68
PCB #169	< 0.007	< 0.02	< 0.01	< 0.003	< 0.007	0	< 0.003	< 0.02	< 0.007	-	81
PCB #28 + PCB #31	37.6	19.0	24.8	30.7	27.7	5	19.0	37.6	27.7	28.0	46
PCB #52	10.6	3.99	5.83	8.07	6.95	5	3.99	10.6	6.95	7.09	76
PCB #101	5.51	3.97	4.82	8.18	6.64	5	3.97	8.18	5.51	5.82	90
PCB #99	1.44	0.89	1.05	1.86	1.47	5	0.89	1.86	1.44	1.34	
PCB #123	< 0.06	< 0.07	0.093	0.14	0.096	3	< 0.06	0.14	0.093	-	
PCB #118	1.91	1.41	1.11	1.96	1.35	5	1.11	1.96	1.41	1.55	
PCB #114	< 0.06	< 0.05	< 0.03	< 0.04	< 0.02	0	< 0.02	< 0.06	< 0.04	-	
PCB #105	0.41	0.30	0.23	0.39	0.29	5	0.23	0.41	0.30	0.32	
PCB #153	3.00	1.46	1.33	2.23	1.78	5	1.33	3.00	1.78	1.96	73
PCB #138	3.74	2.13	1.72	2.90	2.54	5	1.72	3.74	2.54	2.61	
PCB #167	0.31	0.20	0.11	0.20	0.19	5	0.11	0.31	0.20	0.20	
PCB #156	0.12	0.11	< 0.04	< 0.06	0.062	3	< 0.04	0.12	0.062	-	
PCB #157	< 0.06	< 0.04	< 0.02	< 0.02	< 0.02	0	< 0.02	< 0.06	< 0.02	-	
PCB #187	1.03	0.36	0.43	0.91	0.48	5	0.36	1.03	0.48	0.64	
PCB #183	0.41	0.17	0.17	0.37	0.20	5	0.17	0.41	0.20	0.26	
PCB #180	0.44	0.27	0.19	0.41	0.27	5	0.19	0.44	0.27	0.32	86
PCB #170	0.26	0.27	0.12	0.20	0.20	5	0.12	0.27	0.20	0.21	
PCB #189	< 0.01	< 0.02	< 0.02	< 0.01	< 0.01	0	< 0.01	< 0.02	< 0.01	-	
PCB #202	0.056	< 0.03	< 0.04	< 0.07	< 0.03	1	< 0.03	0.056	< 0.04	-	94
PCB #194	< 0.04	< 0.03	< 0.02	< 0.03	< 0.02	0	< 0.02	< 0.04	< 0.03	-	
PCB #206	< 0.04	< 0.04	< 0.02	< 0.04	< 0.03	0	< 0.02	< 0.04	< 0.04	-	
Sum of PCBs (inc) <sup>2</sup>	67.1	34.9	42.2	58.8	50.4		34.9	67.1	50.4	50.7	
Sum of PCBs (exc) <sup>3</sup>	67.0	34.8	42.1	58.7	50.3		34.8	67.0	50.3	50.6	
Total PCB TEQ (inc) <sup>1,2</sup>	1.47	6.96	1.29	1.41	1.33		1.29	6.96	1.41	2.49	
Total PCB TEQ (exc) <sup>1,3</sup>	0.40	6.84	0.22	0.36	0.29		0.22	6.84	0.36	1.62	

1 = Total PCB TEQ data reported in fg m<sup>-3</sup>. All other results in pg m<sup>-3</sup>.

2 = Including half LOD values.

3 = Excluding LOD values.

4 = Excludes any LOD value which is greater than a maximum measured value.

5 = Mean value reported only if a PCB congener detected on more than 66% of occasions (minimum of 4 positive determinations).

**Table E7 Concentrations of PCBs in Greymouth air (pg m<sup>-3</sup>)<sup>1</sup>**

Congener	AR-08-1 (21/06/96 to 12/07/96)	AR-08-2 (15/07/96 to 05/08/96)	AR-08-3 (12/08/96 to 02/09/96)	AR-08-4 (04/02/97 to 28/02/97)	AR-08-5 (04/03/97 to 24/03/97)	Number of positives	Minimum	Maximum <sup>4</sup>	Median	Mean <sup>5</sup>	Mean of <sup>13</sup> C surrogate standard recoveries, %, (n=5)
PCB #77	0.12	0.12	0.13	0.15	2.26	5	0.12	2.26	0.13	0.56	99
PCB #126	< 0.04	< 0.05	< 0.06	< 0.03	< 0.02	0	< 0.02	< 0.06	< 0.04	-	72
PCB #169	< 0.02	< 0.02	< 0.02	< 0.008	< 0.01	0	< 0.008	< 0.02	< 0.02	-	87
PCB #28 + PCB #31	10.8	17.0	21.6	29.0	31.5	5	10.8	31.5	21.6	22.0	49
PCB #52	5.16	5.67	4.72	16.6	7.80	5	4.72	16.6	5.67	7.99	64
PCB #101	6.00	6.80	4.14	8.70	8.71	5	4.14	8.71	6.80	6.87	102
PCB #99	1.12	1.22	0.91	1.88	1.84	5	0.91	1.88	1.22	1.39	
PCB #123	0.088	< 0.2	< 0.1	0.14	0.15	3	< 0.1	0.15	0.088	-	
PCB #118	1.32	1.42	1.10	1.76	2.03	5	1.10	2.03	1.42	1.53	
PCB #114	< 0.02	< 0.05	< 0.04	< 0.03	< 0.03	0	< 0.02	< 0.05	< 0.03	-	
PCB #105	0.33	0.32	0.28	0.38	0.44	5	0.28	0.44	0.33	0.35	
PCB #153	1.77	2.13	1.24	2.39	2.90	5	1.24	2.90	2.13	2.09	91
PCB #138	2.61	2.99	1.99	3.94	4.26	5	1.99	4.26	2.99	3.16	
PCB #167	0.25	0.23	0.23	0.28	0.28	5	0.23	0.28	0.25	0.25	
PCB #156	0.10	0.084	0.082	0.085	0.086	5	0.082	0.10	0.085	0.087	
PCB #157	< 0.03	< 0.05	< 0.05	< 0.01	< 0.02	0	< 0.01	< 0.05	< 0.03	-	
PCB #187	0.32	0.50	0.28	0.67	0.90	5	0.28	0.90	0.50	0.53	
PCB #183	0.14	0.21	0.13	0.28	0.34	5	0.13	0.34	0.21	0.22	
PCB #180	0.24	0.29	0.22	0.32	0.55	5	0.22	0.55	0.29	0.32	100
PCB #170	0.24	0.23	0.19	0.23	0.39	5	0.19	0.39	0.23	0.26	
PCB #189	< 0.01	< 0.03	< 0.02	< 0.01	< 0.01	0	< 0.01	< 0.03	< 0.01	-	
PCB #202	< 0.04	< 0.04	< 0.04	< 0.02	< 0.02	0	< 0.02	< 0.04	< 0.04	-	107
PCB #194	< 0.04	< 0.03	0.053	< 0.03	< 0.03	1	< 0.03	0.053	< 0.03	-	
PCB #206	< 0.01	< 0.04	0.12	< 0.01	< 0.04	1	< 0.01	0.12	< 0.04	-	
Sum of PCBs (inc) <sup>2</sup>	30.7	39.5	37.6	66.9	64.5		30.7	66.9	39.5	47.8	
Sum of PCBs (exc) <sup>3</sup>	30.6	39.2	37.4	66.8	64.4		30.6	66.8	39.2	47.7	
Total PCB TEQ (inc) <sup>1,2</sup>	2.43	2.94	3.40	1.93	2.55		1.93	3.40	2.55	2.65	
Total PCB TEQ (exc) <sup>1,3</sup>	0.31	0.30	0.27	0.37	1.48		0.27	1.48	0.31	0.55	

1 = Total PCB TEQ data reported in fg m<sup>-3</sup>. All other results in pg m<sup>-3</sup>.

2 = Including half LOD values.

3 = Excluding LOD values.

4 = Excludes any LOD value which is greater than a maximum measured value.

5 = Mean value reported only if a PCB congener detected on more than 66% of occasions (minimum of 4 positive determinations).

**Table E8 Concentrations of PCBs in Christchurch air ( $\mu\text{g m}^{-3}$ )<sup>1</sup>**

Congener	AR-09-1 (19/06/96 to 09/07/96)	AR-09-2 (14/08/96 to 04/09/96)	AR-09-3 (09/10/96 to 01/11/96)	AR-09-4 (13/11/96 to 04/12/96)	AR-09-5 (22/01/97 to 12/02/97)	AR-09-6 (10/03/97 to 25/03/97)	Number of positives	Minimum	Maximum <sup>4</sup>	Median	Mean <sup>5</sup>
PCB #77	0.25	0.14	0.12	0.11	0.13	0.14	6	0.11	0.25	0.14	0.15
PCB #126	0.092	0.064	0.027	0.027	0.035	0.023	6	0.023	0.092	0.031	0.045
PCB #169	< 0.01	< 0.02	< 0.02	< 0.01	< 0.01	< 0.01	0	< 0.01	< 0.02	< 0.01	-
PCB #28 + PCB #31	9.05	12.1	17.5	17.4	13.5	17.5	6	9.05	17.5	15.5	14.5
PCB #52	3.49	2.69	3.57	4.05	3.43	4.19	6	2.69	4.19	3.53	3.57
PCB #101	6.15	3.91	6.85	9.11	9.58	6.86	6	3.91	9.58	6.86	7.08
PCB #99	1.01	0.70	1.07	1.29	1.16	1.08	6	0.70	1.29	1.08	1.05
PCB #123	0.22	0.069	0.20	0.20	0.32	0.15	6	0.069	0.32	0.20	0.19
PCB #118	2.74	1.48	1.44	1.87	1.84	1.45	6	1.44	2.74	1.66	1.80
PCB #114	< 0.01	< 0.04	< 0.04	< 0.03	< 0.03	< 0.01	0	< 0.01	< 0.04	< 0.03	-
PCB #105	0.75	0.31	0.30	0.32	0.31	0.28	6	0.28	0.75	0.31	0.38
PCB #153	4.08	2.36	3.02	4.20	5.08	3.56	6	2.36	5.08	3.82	3.72
PCB #138	7.25	3.49	3.98	5.54	6.50	5.21	6	3.49	7.25	5.38	5.33
PCB #167	1.03	0.32	0.23	0.31	0.37	0.30	6	0.23	1.03	0.32	0.43
PCB #156	0.70	0.14	0.11	0.10	0.13	0.11	6	0.10	0.70	0.12	0.22
PCB #157	< 0.2	< 0.04	< 0.03	< 0.02	< 0.02	< 0.02	0	< 0.02	< 0.2	< 0.03	-
PCB #187	0.86	0.68	0.97	1.83	1.80	1.21	6	0.68	1.83	1.09	1.23
PCB #183	0.48	0.28	0.41	0.72	0.72	0.47	6	0.28	0.72	0.48	0.51
PCB #180	1.20	0.53	0.48	0.89	0.84	0.67	6	0.48	1.20	0.76	0.77
PCB #170	1.43	0.48	0.38	0.54	0.62	0.51	6	0.38	1.43	0.53	0.66
PCB #189	< 0.06	< 0.03	< 0.05	< 0.02	< 0.02	< 0.02	0	< 0.02	< 0.06	< 0.03	-
PCB #202	< 0.2	0.040	< 0.03	< 0.08	< 0.05	< 0.03	1	< 0.03	0.040	< 0.07	-
PCB #194	0.31	0.045	< 0.04	< 0.07	< 0.04	< 0.03	2	< 0.03	0.31	< 0.06	-
PCB #206	< 0.03	< 0.04	< 0.01	< 0.03	< 0.01	< 0.01	0	< 0.01	< 0.04	< 0.02	-
Sum of PCBs (inc) <sup>2</sup>	41.3	29.9	40.8	48.6	46.5	43.8		29.9	48.6	42.6	41.8
Sum of PCBs (exc) <sup>3</sup>	41.1	29.8	40.7	48.5	46.4	43.7		29.8	48.5	42.4	41.7
Total PCB TEQ (inc) <sup>1,2</sup>	10.3	6.90	3.17	3.17	4.01	2.73		2.73	10.3	3.59	5.05
Total PCB TEQ (exc) <sup>1,3</sup>	10.2	6.78	3.05	3.11	3.95	2.67		2.67	10.2	3.53	4.96

1 = Total PCB TEQ data reported in  $\text{fg m}^{-3}$ . All other results in  $\text{pg m}^{-3}$ .

2 = Including half LOD values.

3 = Excluding LOD values.

4 = Excludes any LOD value which is greater than a maximum measured value.

5 = Mean value reported only if a PCB congener detected on more than 66% of occasions (minimum of 4 positive determinations).

**Table E9 Concentrations of PCBs in Auckland City air (pg m<sup>-3</sup>)<sup>1</sup>**

Congener	AR-01-2 (17/07/96 to 06/08/96)	AR-01-3 (11/11/96 to 02/12/96)	AR-01-4 (07/01/97 to 28/01/97)	AR-01-5 (06/03/97 to 26/03/97)	Number of positives	Minimum	Maximum	Median	Mean <sup>4,5</sup>	Mean of <sup>13</sup> C surrogate standard recoveries, %, (n=4)
PCB #77	0.27	0.44	0.42	0.31	4	0.27	0.44	0.37	0.36	69
PCB #126	< 0.05	< 0.03	< 0.03	< 0.02	0	< 0.02	< 0.05	< 0.03	-	56
PCB #169	< 0.01	< 0.01	< 0.01	< 0.01	0	< 0.01	< 0.01	< 0.01	-	69
PCB #28 + PCB #31	56.0	77.1	54.9	47.4	4	47.4	77.1	55.5	58.9	37
PCB #52	14.7	16.3	15.6	15.8	4	14.7	16.3	15.7	15.6	63
PCB #101	12.8	15.7	21.3	17.5	4	12.8	21.3	16.6	16.8	71
PCB #99	3.10	3.77	4.91	4.53	4	3.10	4.91	4.15	4.08	
PCB #123	< 0.2	0.30	0.30	0.18	3	< 0.2	0.30	0.24	0.22	
PCB #118	3.45	3.80	4.59	3.81	4	3.45	4.59	3.81	3.91	
PCB #114	0.092	0.17	0.10	0.059	4	0.059	0.17	0.10	0.11	
PCB #105	0.78	0.92	0.94	0.86	4	0.78	0.94	0.89	0.88	
PCB #153	3.01	3.30	3.59	3.42	4	3.01	3.59	3.36	3.33	63
PCB #138	4.85	5.01	5.36	5.57	4	4.85	5.57	5.19	5.20	
PCB #167	0.48	0.47	0.41	0.50	4	0.41	0.50	0.48	0.47	
PCB #156	0.19	0.16	0.14	0.15	4	0.14	0.19	0.16	0.16	
PCB #157	0.042	0.082	< 0.03	0.036	3	< 0.03	0.082	0.039	0.044	
PCB #187	0.53	0.74	0.95	0.66	4	0.53	0.95	0.70	0.72	
PCB #183	0.25	0.33	0.39	0.28	4	0.25	0.39	0.31	0.31	
PCB #180	0.42	0.41	0.47	0.43	4	0.41	0.47	0.43	0.43	74
PCB #170	0.37	0.27	0.34	0.30	4	0.27	0.37	0.32	0.32	
PCB #189	< 0.02	< 0.08	< 0.04	< 0.03	0	< 0.02	< 0.08	< 0.04	-	
PCB #202	< 0.04	< 0.04	< 0.08	< 0.04	0	< 0.04	< 0.08	< 0.04	-	80
PCB #194	< 0.04	< 0.08	< 0.06	< 0.04	0	< 0.04	< 0.08	< 0.05	-	
PCB #206	< 0.03	< 0.06	< 0.08	< 0.05	0	< 0.03	< 0.08	< 0.06	-	
Sum of PCBs (inc) <sup>2</sup>	102	129	115	102		102	129	109	112	
Sum of PCBs (exc) <sup>3</sup>	101	129	115	102		101	129	109	112	
Total PCB TEQ (inc) <sup>1,2</sup>	3.33	2.52	2.52	1.85		1.85	3.33	2.52	2.56	
Total PCB TEQ (exc) <sup>1,3</sup>	0.77	0.96	0.96	0.80		0.77	0.96	0.88	0.87	

1 = Total PCB TEQ data reported in fg m<sup>-3</sup>. All other results in pg m<sup>-3</sup>.

2 = Including half LOD values.

3 = Excluding LOD values.

4 = Mean value reported only if a PCB congener detected on more than 66% of occasions (minimum of 3 positive determinations).

5 = For any individual congener, calculation of the mean includes half LOD values.

**Table E10 Concentrations of PCBs in Auckland South air (pg m<sup>-3</sup>)<sup>1</sup>**

Congener	AR-02-1 (15/03/96 to 04/04/96)	AR-02-2/AR-02-2 CS (n=2) <sup>4</sup> (26/06/96 to 16/07/96)	AR-02-3 (12/08/96 to 03/09/96)	AR-02-4/AR-02-4 CS (n=2) <sup>4</sup> (16/10/96 to 05/11/96)	AR-02-5/AR-02-5 CS (n=2) <sup>4</sup> (06/12/96 to 26/12/96)	Number of positives	Minimum	Maximum	Median	Mean <sup>5,6</sup>	Mean of <sup>13</sup> C surrogate standard recoveries, %, (n=8)
PCB #77	1.10	0.67	0.38	0.60	0.66	5	0.38	1.10	0.66	0.68	88
PCB #126	0.30	0.076	0.12	0.092	0.093	5	0.076	0.30	0.093	0.14	56
PCB #169	< 0.06	< 0.03	< 0.02	< 0.03	< 0.02	0	< 0.02	< 0.06	< 0.03	-	66
PCB #28 + PCB #31	304	132	123	187	170	5	123	304	170	183	40
PCB #52	58.6	35.5	49.5	60.9	61.7	5	35.5	61.7	58.6	53.2	50
PCB #101	36.9	21.0	13.4	22.5	27.1	5	13.4	36.9	22.5	24.2	102
PCB #99	6.61	5.24	3.10	4.83	6.40	5	3.10	6.61	5.24	5.24	
PCB #123	0.51	0.33	< 0.3	0.29	0.28	4	< 0.3	0.51	0.28	0.31	
PCB #118	9.45	5.91	2.97	6.02	6.98	5	2.97	9.45	6.02	6.27	
PCB #114	0.20	0.16	0.11	0.14	0.16	5	0.11	0.20	0.16	0.15	
PCB #105	2.42	1.69	0.84	1.41	1.71	5	0.84	2.42	1.69	1.61	
PCB #153	13.9	6.89	4.26	8.04	7.56	5	4.26	13.9	7.56	8.13	83
PCB #138	22.8	11.3	7.23	12.1	12.2	5	7.23	22.8	12.1	13.1	
PCB #167	1.95	1.43	0.72	1.15	1.33	5	0.72	1.95	1.33	1.32	
PCB #156	1.00	0.71	0.32	0.53	0.58	5	0.32	1.00	0.58	0.63	
PCB #157	0.23	0.16	0.070	0.093	0.13	5	0.070	0.23	0.13	0.14	
PCB #187	3.32	1.28	0.97	1.72	1.35	5	0.97	3.32	1.35	1.73	
PCB #183	1.56	0.68	0.49	0.85	0.68	5	0.49	1.56	0.68	0.85	
PCB #180	2.66	1.47	0.93	1.47	1.04	5	0.93	2.66	1.47	1.51	97
PCB #170	2.30	1.69	0.92	1.47	0.97	5	0.92	2.30	1.47	1.47	
PCB #189	0.16	0.063	0.041	< 0.03	< 0.02	3	< 0.02	0.16	0.041	-	
PCB #202	0.092	0.11	0.061	0.085	0.060	5	0.060	0.11	0.085	0.082	105
PCB #194	0.25	0.23	0.12	0.11	0.060	5	0.060	0.25	0.12	0.15	
PCB #206	0.18	< 0.08	0.10	< 0.06	< 0.04	2	< 0.04	0.18	< 0.08	-	
Sum of PCBs (inc) <sup>2</sup>	471	228	210	311	300		210	471	300	304	
Sum of PCBs (exc) <sup>3</sup>	470	228	210	311	300		210	470	300	304	
Total PCB TEQ (inc) <sup>1,2</sup>	33.1	9.52	13.0	11.0	11.1		9.52	33.1	11.1	15.5	
Total PCB TEQ (exc) <sup>1,3</sup>	32.8	9.39	12.9	10.9	11.0		9.39	32.8	11.0	15.4	

1 = Total PCB TEQ data reported in fg m<sup>-3</sup>. All other results in pg m<sup>-3</sup>.

2 = Including half LOD values.

3 = Excluding LOD values.

4 = Mean of collocated samples.

5 = Mean value reported only if a PCB congener detected on more than 66% of occasions (minimum of 4 positive determinations).

6 = For any individual congener, calculation of the mean includes half LOD values.

**Table E11 Comparative PCB concentrations in primary and collocated samples (pg m<sup>-3</sup>)<sup>1</sup>**

Congener	Hamilton: AR-03-2 (31/05/96 to 20/06/96)			Hamilton: AR-03-2 CS (31/05/96 to 20/06/96)			Hamilton: AR-03-4 (17/09/96 to 10/10/96)			Hamilton: AR-03-4 CS (17/09/96 to 10/10/96)			Auckland South: AR-02-2 (26/06/96 to 16/07/96)			Auckland South: AR-02-2 CS (26/06/96 to 16/07/96)			Auckland South: AR-02-4 (16/10/96 to 05/11/96)			Auckland South: AR-02-4 CS (16/10/96 to 05/11/96)			Auckland South: AR-02-5 (06/12/96 to 26/12/96)			Auckland South: AR-02-5 CS (06/12/96 to 26/12/96)							
	Primary	Collocated	%D <sup>4</sup>	Primary	Collocated	%D	Primary	Collocated	%D	Primary	Collocated	%D	Primary	Collocated	%D	Primary	Collocated	%D	Primary	Collocated	%D	Primary	Collocated	%D	Primary	Collocated	%D	Primary	Collocated	%D					
PCB #77	0.19	0.18	5.4	0.15	0.12	22.2	0.65	0.68	4.5	0.57	0.62	8.4	0.64	0.67	4.6																				
PCB #126	0.048	0.067	33.0	< 0.02	< 0.02	-	0.078	0.073	6.6	0.092	0.092	0	0.093	0.092	1.1																				
PCB #169	< 0.02	< 0.03	-	< 0.007	< 0.006	-	< 0.02	< 0.03	-	< 0.03	< 0.02	-	< 0.02	< 0.02	-																				
PCB #28 + PCB #31	16.6	17.3	4.1	24.9	25.2	1.2	135	128	5.3	191	183	4.3	164	175	6.5																				
PCB #52	6.53	5.89	10.3	9.05	8.71	3.8	35.0	35.9	2.5	60.0	61.8	3.0	61.4	61.9	0.81																				
PCB #101	6.55	6.02	8.4	8.75	8.62	1.5	20.1	21.9	8.6	22.0	23.0	4.4	27.1	27.0	0.37																				
PCB #99	1.43	1.31	8.8	2.06	2.03	1.5	4.87	5.61	14.1	4.68	4.98	6.2	6.28	6.51	3.6																				
PCB #123	0.087	0.11	23.4	< 0.2	< 0.2	-	0.32	0.34	6.1	0.29	0.29	0	0.31	0.24	25.5																				
PCB #118	1.74	1.46	17.5	1.62	2.09	25.3	5.77	6.04	4.6	5.94	6.10	2.7	7.38	6.58	11.5																				
PCB #114	< 0.02	< 0.03	-	< 0.05	< 0.05	-	0.16	0.16	0	0.14	0.13	7.4	0.16	0.15	6.5																				
PCB #105	0.32	0.39	19.7	0.39	0.47	18.6	1.68	1.69	0.59	1.33	1.49	11.3	1.75	1.67	4.7																				
PCB #153	2.25	2.14	5.0	1.80	1.84	2.2	6.77	7.00	3.3	7.88	8.19	3.9	7.63	7.48	2.0																				
PCB #138	3.56	3.27	8.5	2.58	2.70	4.5	11.2	11.3	0.89	12.4	11.8	5.0	12.5	11.8	5.8																				
PCB #167	0.39	0.34	13.7	0.23	0.25	8.3	1.42	1.43	0.70	1.13	1.17	3.5	1.35	1.31	3.0																				
PCB #156	0.21	0.19	10.0	0.068	0.080	16.2	0.71	0.71	0	0.52	0.54	3.8	0.58	0.58	0																				
PCB #157	< 0.05	< 0.05	-	< 0.02	< 0.02	-	0.16	0.15	6.5	0.093	0.093	0	0.13	0.12	8.0																				
PCB #187	0.57	0.55	3.6	0.37	0.37	0	1.28	1.27	0.78	1.56	1.87	18.1	1.37	1.33	3.0																				
PCB #183	0.25	0.26	3.9	0.16	0.17	6.1	0.68	0.68	0	0.79	0.91	14.1	0.68	0.67	1.5																				
PCB #180	0.66	0.60	9.5	0.23	0.22	4.4	1.47	1.47	0	1.44	1.50	4.1	1.03	1.04	0.97																				
PCB #170	0.68	0.63	7.6	0.19	0.17	11.1	1.71	1.67	2.4	1.40	1.53	8.9	0.95	0.98	3.1																				
PCB #189	< 0.04	< 0.03	-	< 0.01	< 0.01	-	0.059	0.067	12.7	< 0.03	< 0.03	0	< 0.02	< 0.02	-																				
PCB #202	< 0.06	< 0.04	-	< 0.04	< 0.03	-	0.10	0.11	9.5	0.084	0.085	1.2	0.058	0.061	5.0																				
PCB #194	0.11	0.10	9.5	< 0.02	< 0.02	-	0.24	0.21	13.3	0.099	0.12	19.2	0.055	0.064	15.1																				
PCB #206	< 0.04	< 0.08	-	< 0.02	< 0.03	-	< 0.07	< 0.08	-	< 0.06	< 0.06	-	< 0.04	< 0.03	-																				
Sum of PCBs (inc) <sup>2</sup>	42.3	40.9	3.4	52.7	53.2	0.94	229	227	0.88	313	309	1.3	295	305	3.3																				
Sum of PCBs (exc) <sup>3</sup>	42.2	40.8	3.4	52.5	53.0	0.95	229	226	1.3	313	309	1.3	295	305	3.3																				
Total PCB TEQ (inc) <sup>1,2</sup>	5.41	7.32	30.0	1.40	1.44	2.8	9.72	9.31	4.3	10.9	11.0	0.91	11.2	11.0	1.8																				
Total PCB TEQ (exc) <sup>1,3</sup>	5.29	7.15	29.9	0.33	0.38	14.1	9.62	9.16	4.9	10.8	10.9	0.92	11.1	10.9	1.8																				

1 = Total PCB TEQ data reported in fg m<sup>-3</sup>. All other results in pg m<sup>-3</sup>.

2 = Including half LOD values.

3 = Excluding LOD values.

4 = % Difference as calculated from Equation 1 (refer Section 5.6.1).

**Table E12 Concentrations of PCBs in field and equipment rinsate blanks (pg m<sup>-3</sup>)<sup>1,2</sup>**

Congener	Field blank; AR-07-3 FB (Nelson Lakes National Park: Reference)	Field blank; AR-04-1 FB (Te Wera: Rural)	Field blank; AR-03-2 FB (Hamilton: Urban)	Field blank; AR-05-3 FB (Masterton: Urban)	Field blank; AR-09-2 FB (Christchurch: Urban)	Field blank; AR-02-1 FB (Auckland South: Industrial)	Equipment rinsate blank; AR-10-5 RB (Culverden: Rural)	Equipment rinsate blank; AR-01-1 RB (Auckland City: Urban)	Equipment rinsate blank; AR-01-2 RB (Auckland City: Urban)	Mean of <sup>13</sup> C surrogate standard recoveries, %, (n=9)
PCB #77	< 0.003	< 0.005	< 0.006	< 0.002	< 0.003	< 0.007	< 0.004	< 0.003	< 0.002	82
PCB #126	< 0.004	< 0.002	< 0.004	< 0.005	< 0.004	< 0.002	< 0.004	< 0.005	< 0.002	72
PCB #169	< 0.003	< 0.002	< 0.002	< 0.006	< 0.005	< 0.002	< 0.005	< 0.003	< 0.004	87
PCB #28 + PCB #31	< 0.6	< 0.1	< 0.6	0.74	< 0.4	< 0.8	< 0.06	< 0.2	< 0.1	86
PCB #52	< 0.09	< 0.02	< 0.1	0.12	< 0.05	< 0.2	< 0.01	< 0.02	< 0.03	87
PCB #101	< 0.07	< 0.03	< 0.2	< 0.04	< 0.05	< 0.1	< 0.01	< 0.03	< 0.07	90
PCB #99	< 0.02	< 0.02	< 0.04	< 0.03	< 0.03	< 0.04	< 0.01	< 0.02	< 0.02	
PCB #123	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	
PCB #118	< 0.04	< 0.02	< 0.09	< 0.04	< 0.03	< 0.1	< 0.01	< 0.02	< 0.05	
PCB #114	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	
PCB #105	< 0.01	< 0.01	< 0.02	< 0.01	< 0.01	< 0.03	< 0.01	< 0.01	< 0.01	
PCB #153	< 0.03	< 0.01	< 0.04	< 0.03	< 0.03	< 0.06	< 0.01	< 0.02	< 0.03	84
PCB #138	< 0.05	< 0.02	< 0.09	< 0.04	< 0.04	< 0.1	< 0.01	< 0.02	< 0.06	
PCB #167	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.02	< 0.01	< 0.01	< 0.01	
PCB #156	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.02	< 0.01	< 0.01	< 0.01	
PCB #157	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.02	< 0.01	< 0.01	< 0.02	
PCB #187	< 0.01	< 0.02	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.02	< 0.03	
PCB #183	< 0.01	< 0.02	< 0.01	< 0.01	< 0.01	< 0.02	< 0.01	< 0.02	< 0.03	
PCB #180	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.02	78
PCB #170	< 0.01	< 0.02	< 0.01	< 0.01	< 0.01	< 0.02	< 0.01	< 0.03	< 0.05	
PCB #189	< 0.01	< 0.02	< 0.01	< 0.01	< 0.01	< 0.02	< 0.01	< 0.02	< 0.03	
PCB #202	< 0.01	< 0.03	< 0.02	< 0.01	< 0.01	< 0.02	< 0.01	< 0.04	< 0.06	88
PCB #194	< 0.01	< 0.02	< 0.01	< 0.01	< 0.01	< 0.02	< 0.01	< 0.02	< 0.03	
PCB #206	< 0.01	< 0.03	< 0.02	< 0.01	< 0.01	< 0.03	< 0.01	< 0.04	< 0.06	
Sum of PCBs (inc) <sup>3</sup>	0.53	0.23	0.67	1.03	0.39	0.86	0.14	0.30	0.37	
Sum of PCBs (exc) <sup>4</sup>	0	0	0	0.86	0	0	0	0	0	
Total PCB TEQ (inc) <sup>2,3</sup>	0.23	0.12	0.23	0.29	0.24	0.13	0.24	0.28	0.14	
Total PCB TEQ (exc) <sup>2,4</sup>	0	0	0	0	0	0	0	0	0	

1 = Results reported using the volume of the associated primary air sample collected.

2 = Total PCB TEQ data reported in fg m<sup>-3</sup>. All other results in pg m<sup>-3</sup>.

3 = Including half LOD values.

4 = Excluding LOD values.