Electronic Supplementary Material (ESI) for Journal of Environmental Monitoring

Supporting information

for

Using passive air samplers to assess local sources versus long range atmospheric transport of POPs.

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Table S1:Site description and details.

Country	Number	Name	Latitude	Longitude	Start	End	Average sampling rate (m^3 day^{-1})	PRCs[1)]	Deployment days	Temperature (°C)
Norway	***1***.	Oslo[4)]	N 59°55	E 10°44	03.07	03.10	3.50[2)]	-	92	17
Norway	***2.***	Holmestrand	N 59°28	E 10°19	08.07	09.10	3.52	6	93	16
Norway	***3.***	Tønsberg	N 59°15	E 10°23	08.07	09.10	4.85	6	93	16
Norway	***4.***	Nøtterøy	N 59°10	E 10°23	08.07	09.10	3.49	6	93	16
Norway	***5.***	Kragerø	N 58°51	E 09°25	09.07	10.10	4.33	6	93	15
Norway	***6.***	Arendal	N 58°29	E 08°50	09.07	10.10	4.26	3	93	15
Norway	***7a.***	Kristiansand I	N 58°08	E 08°04	10.07	10.10	4.56	5	92	16
Norway	***7b.***	Kristiansand II	N 58°08	E 07°58	10.07	10.10	4.25	4	92	16
Norway	***8.***	Farsund	N 58°09	E 06°48	10.07	11.10	3.21	4	93	16
Norway	***9.***	Fedafjorden	N 58°16	E 06°52	10.07	11.10	3.19	5	93	16
Norway	***10.***	Flekkefjord	N 58°16	E 06°38	10.07	11.10	3.46	3	93	16
Norway	***11.***	Stavanger	N 58°58	E 05°44	11.07	11.10	3.86	5	92	16
Norway	***12.***	Sauda	N 59°38	E 06°19	13.07	12.10	3.95	3	91	15
Norway	***13a.***	Bergen I	N 60°24	E 05°18	14.07	13.10	3.78	4	91	16
Norway	***13b.***	Bergen II	N 60°23	E 05°07	14.07	13.10	4.41	3	91	15
Norway	***14.***	Sunndalsøra	N 62°43	E 08°26	15.07	14.10	3.04	3	91	15
Norway	***15a.***	Trondheim I	N 63°26	E 10°21	16.07	16.10	3.31	2	92	14
Norway	***15b.***	Trondheim II	N 63°26	E 10°25	16.07	16.10	3.48	4	92	14
Norway	***16.***	Hommelvik	N 63°25	E 10°48	16.07	17.10	3.50	3	93	14
Norway	***17.***	Brønnøysund	N 65°28	E 12°11	18.07	17.10	6.08	3	91	13
Norway	***18.***	Mo i Rana	N 66°19	E 14°05	19.07	18.10	3.99	2	91	12
Norway	***19a.***	Narvik I	N 68°24	E 17°24	20.07	19.10	4.50	3	91	10
Norway	***19b.***	Narvik II	N 68°22	E 17°35	20.07	19.10	2.72	2	91	10
Norway	***20.***	Ramsundet	N 68°30	E 16°26	21.07	20.10	3.50[2)]	-	91	10
Norway	***21.***	Harstad	N 68°48	E 16°32	21.07	20.10	7.66	1	91	10

Country	Number	Name	Latitude	Longitude	Start	End	Average sampling rate (m^3 day^{-1})	PRCs[1)]	Deployment days	Temperature (°C)
Norway	***22a.***	Tromsø I	N 69°39	E 18°56	04.07	04.10	5.56	3	92	8
Norway	***22b.***	Tromsø II	N 69°40	E 18°57	04.07	04.10	3.50[2)]	-	92	8
Norway	I.	Birkenes [3), 4)]	N 58°23	E 08°15	02.07	01.10	3.83	5/6	91	14
Norway	II.	Hurdal [4)]	N 60°22	E 11°04	01.07	02.10	3.93	5	93	13
Norway	III.	Kårvatn [4)]	N 62°47	E 08°53	29.06	10.10	2.92	6	103	15
Norway	IV.	Tustervatn [4)]	N 65°50	E 13°55	28.06	09.10	3.39	4	103	9
Norway	V.	Karasjok [4)]	N 69°28	E 25°13	26.06	29.09	4.41	6	95	10
Sweden	VI.	Vavihill [4)]	N 56°01	E 13°09	11.07	08.10	3.47	5	89	16
Sweden	VII.	Råö [3), 4)]	N 57°24	E 11°55	04.07	02.10	7.29	6	89	17
Sweden	VIII.	Hoburgen [4)]	N 56°55	E 18°09	30.06	03.10	6.71	6	95	17
Sweden	IX.	Aspvreten [4)]	N 58°48	E 17°23	06.07	06.10	1.66	2	92	16
Sweden	X.	Bredkälen [4)]	N 63°51	E 15°20	06.06	06.09	2.56	3	92	13
Sweden	XI.	Vindeln [4)]	N 64°15	E 19°46	28.06	28.09	3.41	6	92	15
Sweden	XII.	Abisko [4)]	N 68°21	E 18°49	06.07	11.10	6.11	6	97	5

[1)] Number of PRCs with more than 40 % loss during deployment
[2)] No significant loss of PRCs, default value used
[3)] Two samplers co-deployed at this site
[4)] Part of the European campaign, and is a background site [1]

Table S2: Range in recoveries for the internal standards for exposed samples, field and method blanks, as well as PRCs for field and method blanks respectively in %.

	RANGE		
Internal standards	Exposed samples	Field blank	Method blank
^{13}C-PeCB	25-48	33-45	27-37
^{13}C-PCB (28)	59-97	74-91	67-79
^{13}C-PCB (52)	55-92	75-82	69-82
^{13}C-PCB (101)	62-114	86-106	80-95
^{13}C-PCB (105)	67-127	101-122	106-115
^{13}C-PCB (114)	67-128	98-120	101-110
^{13}C-PCB (118)	68-131	99-123	93-109
^{13}C-PCB (123)	69-132	100-121	101-111
^{13}C-PCB (153)	66-124	100-130	97-114
^{13}C-PCB (138)	71-137	106-121	107-115
^{13}C-PCB (167)	73-135	111-136	114-127
^{13}C-PCB (156)	74-130	116-141	115-129
^{13}C-PCB (157)	72-134	117-134	117-130
^{13}C-PCB (180)	71-120	108-131	105-125
^{13}C-PCB (189)	75-147	119-147	121-128
^{13}C-PCB (209)	63-131	116-126	110-127
2-Methylnaftalene-d_{10}	19-52	34-48	32-40
Acenaphtene-d_{10}	23-65	40-55	39-61
Antracene-d_{10}	29-96	45-62	53-60
Pyrene-d_{10}	35-110	56-78	71-76
Benz(a)antrachene-d_{12}	40-122	70-93	88-111
Benz(e)pyrene-d_{12}	39-128	66-92	80-91
Benzo(ghi)perylene-d_{12}	45-116	64-94	82-96
^{13}C-α-HCH	36-117	59-65	41-67
^{13}C-β-HCH	45-150	75-83	65-88
^{13}C-γ-HCH	54-120	69-78	69-81

	RANGE		
Internal standards	Exposed samples	Field blank	Method blank
^{13}C-HCB	37-62	42-57	38-47
^{13}C-*p,p'*-DDE	60-136	92-101	68-103
^{13}C-*p,p'*-DDT	64-197[1)]	95-119	83-119
^{13}C-trans-chlordane	29-105	64-111	71-105
^{13}C-trans-nonachlor	20-117	53-108	64-102
^{13}C Mirex	12-124	51-113	73-131
PRCs			
d6-γ-HCH	-	92-116	82-106
PCB-12	-	83-101	80-107
PCB-14	-	77-91	74-100
PCB-23	-	83-106	86-103
PCB-30	-	70-84	67-90
PCB-32	-	82-110	86-105
PCB-107	-	92-112	87-110
PCB-198	-	80-117	90-116

[1)] One of the samples experienced an elevated % recovery, due to an instrumental problem.

Table S3a): Concentrations of PCBs at coastal sites (pg/m^3).

Sites	PCB-28	PCB-52	PCB-101	PCB-118	PCB-138	PCB-153	PCB-180	Σ_7PCBs
Oslo	9.8	16.5	13.1	3.7	3.1	4.7	0.8	51.5
Holmestrand	4.9	6.1	4.5	1.8	1.8	2.5	0.6	22.3
Tønsberg	3.9	5.0	3.7	1.2	1.5	2.3	0.6	18.1
Nøtterøy	3.9	6.1	4.8	2.1	2.1	2.7	0.5	22.2
Kragerø	7.8	7.5	4.2	1.4	1.9	2.9	0.9	26.7
Arendal	3.3	3.1	2.1	0.7	0.9	1.7	0.4	12.1
Kristiansand I	2.8	3.9	2.8	1.0	1.1	1.6	0.4	13.6
Kristiansand II	8.5	14.6	15.2	7.3	5.1	6.6	1.3	58.7
Farsund	2.0	2.4	1.9	0.6	0.8	1.4	0.3	9.3
Fedafjorden	10.1	5.7	3.1	0.9	1.0	1.6	0.4	22.9
Flekkefjord	1.9	2.2	1.7	0.4	0.6	1.0	0.2	7.9
Stavanger	6.8	12.2	10.1	3.5	3.4	4.9	1.0	41.9
Sauda	2.8	5.2	5.5	2.6	1.7	2.1	0.3	20.1
Bergen I	9.2	21.1	19.0	6.7	6.2	8.6	1.5	72.3
Bergen II	3.5	6.8	3.1	1.1	0.9	1.3	0.3	17.0
Sunndalsøra	1.3	1.2	0.9	**0.2**	**0.3**	**0.5**	**0.1**	4.5
Trondheim I	2.8	7.0	6.4	1.9	1.8	2.5	0.5	22.9
Trondheim II	7.7	6.9	5.5	1.8	2.0	3.0	0.7	27.6
Hommelvik	2.6	2.7	2.3	0.8	1.4	2.0	0.5	12.3
Brønnøysund	2.4	2.5	2.3	0.7	1.1	2.0	0.5	11.5
Mo i Rana	5.1	3.3	2.1	0.8	0.9	1.3	0.3	13.7
Narvik I	4.4	4.6	3.3	1.1	1.0	1.4	0.2	16.0
Narvik II	1.5	1.7	1.3	0.4	**0.3**	**0.5**	**0.1**	5.8
Ramsundet	1.0	1.2	1.1	**0.2**	0.6	**0.5**	0.2	4.8
Harstad	1.7	2.2	1.4	0.5	0.7	1.0	0.2	7.7
Tromsø I	8.7	9.7	12.2	2.3	3.8	6.0	1.3	44.0
Tromsø II	2.9	3.4	2.6	0.7	0.7	1.2	0.2	11.6

Numbers in bold red: Less than MDL. Number given is ½ MDL.

Table S3b): Effective air volumes for the PCBs (m^3).

Sites	PCB-28	PCB-52	PCB-101	PCB-118	PCB-138	PCB-153	PCB-180
Oslo	*261*	*282*	*309*	*318*	*319*	*318*	*321*
Holmestrand	268	289	315	324	325	323	326
Tønsberg	344	381	428	444	446	443	449
Nøtterøy	267	287	313	321	322	321	324
Kragerø	320	349	385	397	399	397	401
Arendal	313	342	378	391	392	390	395
Kristiansand I	325	357	399	413	415	413	418
Kristiansand II	308	337	373	385	387	385	389
Farsund	249	266	288	295	296	295	298
Fedafjorden	247	265	286	294	294	293	296
Flekkefjord	264	285	310	318	319	318	321
Stavanger	286	310	340	351	352	350	354
Sauda	290	314	345	355	356	355	358
Bergen I	278	301	330	339	341	339	343
Bergen II	317	346	383	396	397	396	400
Sunndalsøra	236	251	269	274	275	274	276
Trondheim I	257	274	294	301	302	301	303
Trondheim II	268	286	309	317	317	316	319
Hommelvik	272	291	314	322	323	322	324
Brønnøysund	418	464	524	544	547	544	551
Mo i Rana	306	327	352	360	361	360	362
Narvik I	345	369	397	406	407	406	409
Narvik II	223	232	243	246	247	246	247
Ramsundet	*279*	*293*	*311*	*316*	*317*	*316*	*318*
Harstad	524	584	660	686	689	685	694
Tromsø I	421	453	493	506	507	505	510
Tromsø II	*284*	*298*	*315*	*320*	*321*	*320*	*322*

Values in italics: volumes are based on the default value (3.5 m^3/day)

Table S4a): Concentrations of PAHs at coastal sites (ng/m^3).

Sites	Fluorene	Phenanthrene	Anthracene	Fluoranthene	Pyrene	Benz[a]anthracene	Chrysene	Benzo[a]pyrene	Σ_8PAH
Oslo	2.3	6.3	0.07	0.6	0.3	0.01	0.05	**0.005**	9.5
Holmestrand	2.2	3.7	0.07	0.8	0.5	0.01	0.05	**0.005**	7.2
Tønsberg	1.7	3.0	0.07	0.6	0.4	0.02	0.06	**0.005**	5.8
Nøtterøy	1.8	3.0	0.05	0.5	0.3	0.01	0.04	**0.005**	5.7
Kragerø	1.2	1.9	0.05	0.4	0.2	**0.01**	0.03	**0.005**	3.8
Arendal	5.4	4.4	0.5	0.9	0.6	0.04	0.07	**0.005**	12.0
Kristiansand I	1.6	3.0	0.06	0.7	0.4	0.02	0.09	**0.005**	5.9
Kristiansand II	3.4	5.2	0.2	1.5	1.0	0.06	0.2	0.01	11.6
Farsund	1.2	2.1	0.03	0.6	0.3	0.01	0.07	**0.005**	4.3
Fedafjorden	5.7	15.9	0.8	6.5	3.9	0.1	0.3	0.01	33.1
Flekkefjord	2.2	2.9	0.03	0.5	0.2	0.01	0.04	**0.005**	5.9
Stavanger	2.3	5.8	0.1	1.9	1.2	0.04	0.2	**0.005**	11.6
Sauda	5.2	7.6	0.3	3.6	2.2	0.05	0.2	**0.005**	19.2
Bergen I	3.6	7.3	0.2	1.5	1.0	0.04	0.1	**0.005**	13.8
Bergen II	2.6	4.7	0.06	0.8	0.4	0.01	0.05	**0.005**	8.6
Sunndalsøra	3.9	5.7	0.08	0.6	0.2	**0.01**	0.02	**0.005**	10.6
Trondheim I	4.2	8.0	0.3	1.7	0.8	0.02	0.06	**0.005**	15.1
Trondheim II	3.8	7.6	0.2	1.6	0.9	0.03	0.09	**0.005**	14.2
Hommelvik	32.5	40.9	1.5	6.3	2.6	0.04	0.08	**0.005**	83.8
Brønnøysund	1.3	2.9	0.09	0.7	0.4	0.02	0.05	**0.005**	5.4
Mo I Rana	1.5	4.1	0.1	1.0	0.6	0.03	0.07	0.01	7.5
Narvik I	3.9	5.6	0.3	1.1	0.7	0.03	0.05	**0.005**	11.7
Narvik II	1.6	2.9	0.1	0.6	0.4	0.02	0.04	**0.005**	5.5
Ramsundet	0.4	0.6	**0.01**	0.1	0.07	**0.01**	0.02	**0.005**	1.2
Harstad	1.4	1.5	0.07	0.3	0.2	**0.01**	0.02	**0.005**	3.5
Tromsø I	4.6	7.1	0.3	1.3	1.1	0.05	0.1	**0.005**	14.6
Tromsø II	4.0	6.3	0.4	1.0	0.9	0.03	0.07	**0.005**	12.8

Numbers in bold red: Less than MDL. Number given is ½ MDL.

Table S4b): Effective air volumes for the PAHs (m^3).

Sites	Fluorene	Phenanthrene	Anthracene	Fluoranthene	Pyrene	Benzo[a]pyrene	Benz[a]anthracene	Chrysene
Oslo	*113*	*219*	*230*	*297*	*297*	*321*	*318*	*320*
Holmestrand	120	227	237	303	304	327	324	326
Tønsberg	127	276	292	406	407	450	444	448
Nøtterøy	120	226	236	301	301	324	321	323
Kragerø	131	264	277	369	369	402	398	401
Arendal	126	257	270	361	362	395	391	394
Kristiansand I	124	264	278	380	380	419	413	417
Kristiansand II	123	253	266	356	357	390	386	389
Farsund	117	213	222	278	278	298	295	297
Fedafjorden	117	212	221	277	277	296	294	296
Flekkefjord	119	224	234	298	299	322	318	321
Stavanger	121	238	249	326	327	355	351	353
Sauda	124	243	254	331	331	359	355	358
Bergen I	120	233	244	317	317	343	340	342
Bergen II	127	260	274	366	367	401	396	399
Sunndalsøra	119	206	213	260	261	277	275	276
Trondheim I	127	223	231	285	285	304	301	303
Trondheim II	129	231	239	299	299	319	317	319
Hommelvik	130	233	242	304	304	325	322	324
Brønnøysund	153	334	352	497	497	552	545	550
Mo i Rana	153	266	274	341	341	363	360	362
Narvik I	174	300	309	385	384	409	406	409
Narvik II	142	204	208	239	238	248	246	247
Ramsundet	*159*	*249*	*255*	*304*	*303*	*318*	*316*	*318*
Harstad	193	419	438	627	625	696	687	694
Tromsø I	198	360	371	477	475	510	506	510
Tromsø II	*169*	*257*	*262*	*308*	*307*	*322*	*320*	*321*

Values in italics: volumes are based on the default value (3.5 m^3/day)

Table S5a): Concentrations of HCB and HCHs at coastal sites (pg/m^3).

Sites	HCB	α–HCH	β-HCH	γ-HCH	Σ_3HCHs
Oslo	43	14.9	0.3	16	31
Holmestrand	49	17.3	0.5	37	55
Tønsberg	42	18.1	0.5	18	36
Nøtterøy	44	15.4	0.6	17	33
Kragerø	50	16.0	0.6	18	35
Arendal	42	13.2	0.4	17	31
Kristiansand I	51	15.1	0.4	16	31
Kristiansand II	305	20.9	0.8	24	45
Farsund	47	16.9	0.5	15	33
Fedafjorden	47	16.9	0.4	20	37
Flekkefjord	44	14.4	0.3	13	27
Stavanger	42	17.6	0.6	28	47
Sauda	42	13.2	0.2	17	30
Bergen I	56	16.9	0.4	115	133
Bergen II	42	13.4	0.2	14	27
Sunndalsøra	44	12.8	**0.1**	7	20
Trondheim I	45	12.4	**0.1**	9	21
Trondheim II	55	17.5	0.3	15	32
Hommelvik	52	16.7	0.3	13	30
Brønnøysund	47	16.9	0.3	9	26
Mo i Rana	54	13.5	**0.1**	7	20
Narvik I	50	12.9	**0.1**	8	21
Narvik II	70	15.4	**0.1**	6	21
Ramsundet	53	14.7	**0.1**	4	19
Harstad	46	11.3	**0.1**	8	19
Tromsø I	60	21.6	0.2	7	29
Tromsø II	57	22.1	**0.1**	9	31

Numbers in bold red: Less than MDL. Number given is ½ MDL.

Table S5b): Effective air volumes for HCB and HCHs (m^3).

Starion name	HCB	α-HCH	β-HCH	γ-HCH
Oslo	*184*	*216*	*306*	*243*
Holmestrand	190	223	312	250
Tønsberg	220	269	422	313
Nøtterøy	189	222	310	249
Kragerø	215	258	381	295
Arendal	209	251	374	288
Kristiansand I	212	258	394	298
Kristiansand II	206	248	369	283
Farsund	181	209	286	233
Fedafjorden	180	208	284	232
Flekkefjord	188	220	307	247
Stavanger	197	234	337	265
Sauda	201	238	342	269
Bergen I	194	229	327	258
Bergen II	212	255	379	291
Sunndalsøra	176	202	267	222
Trondheim I	189	218	292	241
Trondheim II	194	226	307	251
Hommelvik	196	228	312	254
Brønnøysund	258	322	519	378
Mo i Rana	221	258	350	287
Narvik I	247	290	395	323
Narvik II	180	200	242	214
Ramsundet	*213*	*242*	*310*	*264*
Harstad	311	396	656	470
Tromsø I	286	344	491	389
Tromsø II	*220*	*249*	*314*	*271*

Values in italics: volumes are based on the default value (3.5 m^3/day)

Table S6a): Concentrations of DDTs and Chlordanes at coastal sites (pg/m^3).

Sites	*p,p'*-DDE	*p,p'*-DDD	*o,p'*-DDT	*p,p'*-DDT	Σ_4DDTs	trans-Chlordane	cis-Chlordane	trans-Nonachlor	cis-Nonachlor	Σ_4Chlordanes
Oslo	3.1	**0.1**	1.3	1.6	6.1	N.A	N.A	N.A	N.A	N.A
Holmestrand	6.5	*0.2*	1.8	2.2	10.6	1.2	1.7	1.4	0.2	4.6
Tønsberg	6.2	0.3	2.2	2.5	11.1	1.6	2.4	1.8	0.3	6.2
Nøtterøy	4.6	**0.1**	2.1	2.5	9.2	3.9	3.4	3.4	0.7	11.4
Kragerø	3.5	**0.1**	1.5	1.7	6.7	3.4	4.0	2.6	0.4	10.4
Arendal	**1.3**	*0.1*	0.9	1.1	3.4	1.3	1.4	1.2	0.2	4.0
Kristiansand I	4.0	**0.1**	1.0	1.1	6.3	1.3	1.8	1.6	0.4	5.1
Kristiansand II	5.7	0.3	2.6	3.1	11.7	1.8	2.1	1.9	0.3	6.1
Farsund	4.7	**0.1**	1.5	1.7	8.0	0.5	1.2	1.2	0.2	3.0
Fedafjorden	3.2	**0.1**	1.4	1.4	6.2	0.4	1.2	1.1	0.2	2.9
Flekkefjord	2.8	**0.1**	1.2	1.5	5.7	0.7	1.2	1.2	0.6	3.6
Stavanger	4.7	**0.1**	1.9	2.4	9.2	0.8	1.5	1.7	0.4	4.5
Sauda	**1.3**	**0.1**	0.7	0.7	2.8	0.3	*0.7*	0.8	0.1	1.9
Bergen I	7.8	1.0	11.1	25.7	45.5	1.1	1.6	1.2	0.2	4.2
Bergen II	**1.3**	**0.1**	0.9	1.1	3.4	0.4	*0.9*	0.9	0.1	2.4
Sunndalsøra	**1.3**	*0.06*	0.5	0.4	2.3	N.A	N.A	N.A	N.A	N.A
Trondheim I	**1.3**	**0.1**	0.6	0.7	2.7	0.3	0.9	0.6	0.09	1.9
Trondheim II	2.8	*0.1*	1.0	1.0	4.9	0.6	1.2	1.1	0.2	3.1
Hommelvik	**1.3**	**0.1**	0.8	0.6	2.8	0.4	1.2	1.0	0.2	2.8
Brønnøysund	**1.3**	**0.1**	0.7	0.6	2.7	0.4	1.5	1.1	0.2	3.2
Mo i Rana	**1.3**	**0.1**	**0.2**	**0.1**	**1.7**	0.4	1.0	0.8	0.2	2.2
Narvik I	**1.3**	**0.1**	**0.2**	**0.1**	**1.7**	0.2	0.6	0.5	0.08	1.5
Narvik II	**1.3**	**0.1**	0.4	**0.1**	2.0	0.2	0.8	0.6	0.1	1.7
Ramsundet	**1.3**	**0.1**	0.4	0.3	2.1	0.2	1.0	0.7	0.1	2.0
Harstad	**1.3**	**0.1**	*0.2*	**0.1**	**1.7**	0.15	0.5	0.3	0.05	1.1
Tromsø I	**1.3**	*0.04*	0.5	0.5	2.3	0.5	0.9	1.6	0.3	3.4
Tromsø II	**1.3**	*0.11*	*0.7*	0.6	2.7	**0.02**	0.5	0.9	**0.02**	1.4

Numbers in bold red: Less than MDL. Number given is ½ MDL.

Values in italics: ionic ratio: NO and values could be influenced by a interference

N.A: no results available

Table S6b): Effective air volumes for the DDTs and Chlordanes (m^3).

Starion name	p,p'-DDE	p,p'-DDD	o,p'-DDT	p,p'-DDT	trans-Chlordane	cis-Chlordane	trans-Nonachlor	cis-Nonachlor
Oslo	*317*	*319*	*315*	*318*	*306*	*307*	*314*	*317*
Holmestrand	323	325	321	323	312	313	320	323
Tønsberg	443	446	438	444	423	425	437	443
Nøtterøy	320	322	318	321	310	311	317	320
Kragerø	397	399	393	397	382	383	392	396
Arendal	390	392	386	390	374	376	385	389
Kristiansand I	412	415	408	413	394	396	407	412
Kristiansand II	384	387	381	385	369	371	380	384
Farsund	295	296	293	295	286	287	292	295
Fedafjorden	293	295	291	293	284	285	290	293
Flekkefjord	318	319	315	318	307	308	315	318
Stavanger	350	352	347	350	337	338	346	350
Sauda	354	356	351	355	342	343	351	354
Bergen I	339	341	336	339	327	328	335	339
Bergen II	395	398	391	396	379	381	391	395
Sunndalsøra	274	275	272	274	267	268	272	274
Trondheim I	301	302	299	301	293	293	298	301
Trondheim II	316	317	314	316	307	308	313	316
Hommelvik	321	323	319	322	312	313	319	321
Brønnøysund	543	547	537	544	519	522	537	543
Mo i Rana	360	361	357	360	350	351	357	359
Narvik I	406	407	403	406	395	397	403	405
Narvik II	246	247	245	246	242	243	245	246
Ramsundet	*316*	*317*	*314*	*316*	*310*	*311*	*314*	*316*
Harstad	685	689	678	686	656	660	678	685
Tromsø I	505	507	502	506	491	493	502	505
Tromsø II	*320*	*321*	*318*	*320*	*314*	*315*	*318*	*320*

Values in italics: volumes are based on the default value (3.5 m^3/day)

Table S7a) Concentrations in coastal zones divided by median Norwegian background concentrations (R_{NW}).

	Coastal sites																									
Compounds	Oslo	Holmestrand	Tønsberg	Nøtterøy	Kragerø	Arendal	Kristiansand I	Kristiansand II	Farsund	Fedafjorden	Flekkefjord	Stavanger	Sauda	Bergen I	Bergen II	Sunndalsøra	Trondheim I	Trondheim II	Hommelvik	Brønnøysund	Mo i Rana	Narvik I	Narvik II	Ramsundet	Harstad	Tromsø I	Tromsø II
PCB-28	6.5	3.3	2.5	2.6	5.2	2.2	1.9	5.6	1.3	6.7	1.2	4.5	1.8	6.1	2.3	0.9	1.8	5.1	1.7	1.6	3.3	2.9	1.0	0.7	1.1	5.8	1.9
PCB-52	10.1	3.8	3.1	3.7	4.6	1.9	2.4	9.0	1.5	3.5	1.3	7.5	3.2	12.9	4.2	0.8	4.3	4.2	1.6	1.6	2.0	2.8	1.1	0.7	1.3	5.9	2.1
PCB-101	13.7	4.8	3.9	5.0	4.5	2.2	2.9	16.0	2.0	3.2	1.7	10.6	5.8	20.0	3.2	0.9	6.8	5.8	2.4	2.4	2.2	3.4	1.3	1.2	1.5	12.8	2.8
PCB-118	10.8	5.3	3.5	6.2	4.1	1.9	2.8	21.6	1.7	2.8	1.3	10.4	7.6	19.7	3.3	NQ	5.5	5.3	2.3	2.1	2.4	3.2	1.3	NQ	1.4	6.8	2.1
PCB-138	10.0	5.9	4.8	6.8	6.3	3.0	3.5	16.6	2.7	3.3	1.9	10.9	5.5	20.1	2.8	NQ	5.8	6.6	4.6	3.7	3.0	3.2	NQ	1.9	2.2	12.3	2.2
PCB-153	10.1	5.5	4.9	5.8	6.3	3.6	3.5	14.3	3.0	3.4	2.1	10.5	4.4	18.6	2.8	NQ	5.5	6.4	4.4	4.1	2.7	3.1	NQ	NQ	2.2	12.9	2.3
PCB-180	7.3	5.5	5.9	5.0	8.3	4.0	3.9	12.4	2.9	3.8	2.0	9.6	2.8	15.0	3.1	NQ	4.4	6.3	5.0	4.9	3.3	2.2	NQ	1.8	2.3	12.4	2.0
Σ_7PCBs[1)]	9.7	4.2	3.4	4.2	5.0	2.3	2.6	11.1	1.8	4.3	1.5	7.9	3.8	13.6	3.2	NQ	4.3	5.2	2.3	2.2	2.6	3.0	NQ	NQ	1.5	8.3	2.2
Fluorene	3.1	3.0	2.3	2.5	1.6	7.5	2.1	4.6	1.7	7.8	3.0	3.2	7.2	4.9	3.5	5.4	5.8	5.2	44.6	1.8	2.1	5.4	2.2	0.6	1.9	6.3	5.5
Phenanthrene	5.4	3.2	2.6	2.6	1.6	3.8	2.6	4.5	1.8	13.6	2.5	5.0	6.5	6.3	4.0	4.9	6.8	6.5	35.0	2.4	3.5	4.8	2.4	0.5	1.3	6.1	5.4
Anthracene	4.9	4.9	5.3	3.5	3.4	33.6	4.7	15.9	2.2	56.1	2.6	7.9	21.5	14.9	4.1	5.6	19.4	15.2	112.3	6.8	10.5	20.4	8.2	NQ	4.9	21.4	29.8
Fluoranthene	3.4	4.6	3.9	3.1	2.6	5.7	4.4	9.0	3.7	39.3	3.1	11.8	22.0	9.3	5.2	3.8	10.6	9.8	38.3	4.1	6.2	6.5	3.5	0.7	1.7	7.9	6.3
Pyrene	3.8	6.9	5.5	3.9	3.2	8.1	6.0	14.1	4.2	55.5	3.5	16.7	32.0	14.6	5.4	3.1	11.7	13.0	37.3	5.7	8.3	10.5	5.1	1.0	2.8	16.5	12.9
Benzo[a]pyrene	NQ	NQ	NQ	NQ	NQ	NQ	NQ	2.2	NQ	2.5	NQ	NQ	NQ	NQ	NQ	NQ	NQ	NQ	NQ	NQ	2.2	NQ	NQ	NQ	NQ	NQ	NQ
Benz[a]anthracene	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D
Chrysene	4.4	4.4	5.3	4.2	3.2	6.5	9.0	19.8	6.6	25.4	3.4	19.7	18.5	10.8	4.5	1.8	6.0	8.9	7.7	5.0	6.8	5.1	3.8	1.4	1.9	10.5	6.4
Σ_6PAHs[2)]	4.4	3.4	2.7	2.6	1.8	5.5	2.7	5.3	2.0	15.3	2.7	5.4	8.9	6.4	4.0	4.9	7.0	6.6	38.9	2.5	3.5	5.4	2.6	NQ	1.6	6.8	5.9
α-HCH	2.0	2.3	2.4	2.0	2.1	1.7	2.0	2.8	2.2	2.2	1.9	2.3	1.7	2.2	1.8	1.7	1.6	2.3	2.2	2.2	1.8	1.7	2.0	1.9	1.5	2.8	2.9
β-HCH	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D
γ-HCH	3.6	8.5	4.1	4.0	4.3	4.0	3.6	5.4	3.5	4.6	2.9	6.6	3.9	26.6	3.2	1.6	2.1	3.4	3.0	2.1	1.6	1.9	1.3	1.0	1.8	1.6	2.0
Σ_2HCHs[3)]	2.6	4.5	3.0	2.7	2.9	2.6	2.6	3.7	2.7	3.1	2.3	3.9	2.5	11.1	2.3	1.7	1.8	2.7	2.5	2.2	1.7	1.8	1.8	1.6	1.6	2.4	2.6

	Coastal sites																										
Compounds	Oslo	Holmestrand	Tønsberg	Nøtterøy	Kragerø	Arendal	Kristiansand I	Kristiansand II	Farsund	Fedafjorden	Flekkefjord	Stavanger	Sauda	Bergen I	Bergen II	Sunndalsøra	Trondheim I	Trondheim II	Hommelvik	Brønnøysund	Mo i Rana	Narvik I	Narvik II	Ramsundet	Harstad	Tromsø I	Tromsø II
HCB	1.0	1.2	1.0	1.1	1.2	1.0	1.2	7.3	1.1	1.1	1.1	1.0	1.0	1.3	1.0	1.1	1.1	1.3	1.3	1.1	1.3	1.2	1.7	1.3	1.1	1.4	1.4
p,p'-DDE	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D
p,p'-DDD	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D
o,p'-DDT	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D
p,p'-DDT	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D
Σ_2DDTs[4)]	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D
trans-Chlordane	NQ	3.3	4.5	10.9	9.5	3.5	3.6	5.1	1.3	1.2	1.9	2.2	0.8	3.1	1.2	NQ	0.8	1.5	1.1	1.0	1.1	0.7	0.7	0.6	0.4	1.3	NQ
cis-Chlordane	NQ	2.3	3.2	4.6	5.3	1.9	2.4	2.8	1.6	1.6	1.6	2.0	1.0	2.2	1.3	NQ	1.2	1.6	1.6	2.0	1.3	0.9	1.1	1.3	0.7	1.3	0.7
trans-Nonachlor	NQ	1.8	2.3	4.3	3.2	1.5	2.0	2.4	1.5	1.4	1.5	2.2	1.0	1.5	1.1	NQ	0.8	1.4	1.3	1.4	1.0	0.6	0.7	0.9	0.4	2.0	1.1
cis-Nonachlor	NQ	2.1	3.0	6.5	3.9	1.6	3.6	2.9	1.6	1.6	5.8	4.0	1.1	2.0	1.4	NQ	0.9	1.7	1.7	1.7	1.5	0.8	1.0	1.2	0.5	3.2	NQ
Σ_4Chlordanes	NQ	2.3	3.1	5.7	5.2	2.0	2.5	3.0	1.5	1.5	1.8	2.2	NQ	2.1	NQ	NQ	0.9	1.5	1.4	1.6	1.1	0.7	0.9	1.0	0.5	1.7	NQ

N.Q (not quantified): coastal site concentration < MDL (this study)

N.D (not detected): background concentration < MDL [1]

[1)] Sum of seven PCBs

[2)] Sum of six PAHs (fluorene, phenanthrene, anthracene, fluoranthene, pyrene, chrysene)

[3)] Sum of two HCHs (α and γ-HCH)

[4)] Sum of two DDTs (*o,p`* and *p,p`*-DDT)

Table S7b) Concentrations in coastal zones divided by the maximum Norwegian background concentrations (R_{NWmax})

	Coastal sites																									
Compounds	**Oslo**	**Holmestrand**	**Tønsberg**	**Nøtterøy**	**Kragerø**	**Arendal**	**Kristiansand I**	**Kristiansand II**	**Farsund**	**Fedafjorden**	**Flekkefjord**	**Stavanger**	**Sauda**	**Bergen I**	**Bergen II**	**Sunndalsøra**	**Trondheim I**	**Trondheim II**	**Hommelvik**	**Brønnøysund**	**Mo i Rana**	**Narvik I**	**Narvik II**	**Ramsundet**	**Harstad**	**Tromsø I**	**Tromsø II**
PCB-28	3.5	1.8	1.4	1.4	2.8	1.2	1.0	3.1	0.7	3.7	0.7	2.4	1.0	3.3	1.3	0.5	1.0	2.8	0.9	0.8	1.8	1.6	0.5	0.4	0.6	3.2	1.0
PCB-52	5.2	1.9	1.6	1.9	2.4	1.0	1.2	4.6	0.7	1.8	0.7	3.9	1.7	6.6	2.1	0.4	2.2	2.2	0.8	0.8	1.0	1.4	0.5	0.4	0.7	3.1	1.1
PCB-101	5.1	1.8	1.5	1.9	1.6	0.8	1.1	5.9	0.7	1.2	0.6	3.9	2.1	7.4	1.2	0.3	2.5	2.1	0.9	0.9	0.8	1.3	0.5	0.4	0.6	4.7	1.0
PCB-118	4.6	2.2	1.5	2.6	1.7	0.8	1.2	9.1	0.7	1.2	0.5	4.4	3.2	8.3	1.4	NQ	2.3	2.3	1.0	0.9	1.0	1.4	0.5	NQ	0.6	2.9	0.9
PCB-138	2.1	1.2	1.0	1.4	1.3	0.6	0.7	3.4	0.6	0.7	0.4	2.3	1.1	4.2	0.6	NQ	1.2	1.4	0.9	0.8	0.6	0.7	NQ	0.4	0.5	2.5	0.5
PCB-153	2.2	1.2	1.0	1.2	1.3	0.8	0.7	3.0	0.6	0.7	0.4	2.2	0.9	4.0	0.6	NQ	1.2	1.4	0.9	0.9	0.6	0.7	NQ	NQ	0.5	2.7	0.5
PCB-180	1.0	0.8	0.8	0.7	1.1	0.5	0.5	1.7	0.4	0.5	0.3	1.3	0.4	2.1	0.4	NQ	0.6	0.9	0.7	0.7	0.5	0.3	NQ	0.3	0.3	1.7	0.3
Σ_7PCBs[1)]	3.7	1.6	1.3	1.6	1.9	0.9	1.0	4.3	0.7	1.7	0.6	3.0	1.5	5.3	1.2	NQ	1.7	2.0	0.9	0.8	1.0	1.2	NQ	NQ	0.6	3.2	0.8
Fluorene	0.4	0.4	0.3	0.3	0.2	0.9	0.3	0.6	0.2	0.9	0.4	0.4	0.9	0.6	0.4	0.6	0.7	0.6	5.3	0.2	0.3	0.6	0.3	0.1	0.2	0.8	0.7
Phenanthrene	0.9	0.5	0.4	0.4	0.3	0.7	0.4	0.8	0.3	2.3	0.4	0.9	1.1	1.1	0.7	0.8	1.2	1.1	6.0	0.4	0.6	0.8	0.4	0.1	0.2	1.0	0.9
Anthracene	0.6	0.6	0.7	0.4	0.4	4.2	0.6	2.0	0.3	7.0	0.3	1.0	2.7	1.8	0.5	0.7	2.4	1.9	13.9	0.8	1.3	2.5	1.0	NQ	0.6	2.7	3.7
Fluoranthene	0.6	0.8	0.7	0.5	0.5	1.0	0.8	1.6	0.7	7.1	0.6	2.1	3.9	1.7	0.9	0.7	1.9	1.8	6.9	0.7	1.1	1.2	0.6	0.1	0.3	1.4	1.1
Pyrene	1.1	1.9	1.6	1.1	0.9	2.3	1.7	4.0	1.2	15.7	1.0	4.7	9.1	4.1	1.5	0.9	3.3	3.7	10.6	1.6	2.3	3.0	1.5	0.3	0.8	4.7	3.6
Benzo[a]pyrene	NQ	NQ	NQ	NQ	NQ	NQ	NQ	1.4	NQ	1.5	NQ	NQ	NQ	NQ	NQ	NQ	NQ	NQ	NQ	NQ	1.4	NQ	NQ	NQ	NQ	NQ	NQ
Benz[a]anthracene	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D
Chrysene	2.6	2.6	3.1	2.5	1.9	3.8	5.3	11.6	3.9	14.9	2.0	11.5	10.8	6.3	2.6	1.0	3.5	5.2	4.5	2.9	4.0	3.0	2.2	0.8	1.1	6.1	3.7
Σ_6PAHs[2)]	0.7	0.5	0.4	0.4	0.3	0.8	0.4	0.8	0.3	2.3	0.4	0.8	1.4	1.0	0.6	0.7	1.1	1.0	5.9	0.4	0.5	0.8	0.4	NQ	0.2	1.0	0.9
α-HCH	1.2	1.4	1.5	1.3	1.3	1.1	1.3	1.7	1.4	1.4	1.2	1.5	1.1	1.4	1.1	1.1	1.0	1.5	1.4	1.4	1.1	1.1	1.3	1.2	0.9	1.8	1.8
β-HCH	1.4	2.3	2.5	2.5	2.7	1.7	1.9	3.4	2.2	1.8	1.4	2.8	0.9	1.8	1.1	NQ	NQ	1.5	1.5	1.2	NQ	NQ	NQ	NQ	NQ	1.1	NQ
γ-HCH	2.0	4.6	2.2	2.2	2.3	2.2	2.0	3.0	1.9	2.5	1.6	3.6	2.1	14.5	1.7	0.9	1.1	1.8	1.7	1.2	0.9	1.0	0.7	0.6	1.0	0.9	1.1
Σ_2HCHs[3)]	1.5	2.7	1.8	1.6	1.7	1.5	1.5	2.2	1.6	1.8	1.4	2.3	1.5	6.6	1.4	1.0	1.1	1.6	1.5	1.3	1.0	1.1	1.1	1.0	0.9	1.4	1.5
HCB	0.7	0.8	0.7	0.7	0.8	0.7	0.8	4.8	0.7	0.7	0.7	0.7	0.7	0.9	0.7	0.7	0.7	0.9	0.8	0.7	0.8	0.8	1.1	0.8	0.7	0.9	0.9
p,p'-DDE	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D
p,p'-DDD	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D

	Coastal sites																									
Compounds	**Oslo**	**Holmestrand**	**Tønsberg**	**Nøtterøy**	**Kragerø**	**Arendal**	**Kristiansand I**	**Kristiansand II**	**Farsund**	**Fedafjorden**	**Flekkefjord**	**Stavanger**	**Sauda**	**Bergen I**	**Bergen II**	**Sumndalsøra**	**Trondheim I**	**Trondheim II**	**Hommelvik**	**Brønnøysund**	**Mo i Rana**	**Narvik I**	**Narvik II**	**Ramsundet**	**Harstad**	**Tromsø I**	**Tromsø II**
o,p'-DDT	1.6	2.2	2.7	2.5	1.8	1.1	1.3	3.3	1.9	1.7	1.5	2.4	0.9	13.7	1.2	0.7	0.8	1.3	1.0	0.8	NQ	NQ	0.6	0.5	NQ	0.6	0.9
p,p'-DDT	1.5	2.0	2.3	2.3	1.6	1.0	1.1	2.9	1.6	1.3	1.4	2.3	0.6	23.9	1.0	0.4	0.6	0.9	0.6	0.5	NQ	NQ	NQ	0.3	NQ	0.4	0.6
Σ_2DDTs[4)]	1.5	2.1	2.5	2.4	1.7	1.1	1.2	3.1	1.7	1.5	1.5	2.3	0.7	19.5	1.1	0.5	0.7	1.1	0.8	0.7	NQ	NQ	NQ	0.4	NQ	0.5	NQ
trans-Chlordane	NQ	1.5	2.0	4.8	4.2	1.6	1.6	2.3	0.6	0.5	0.8	1.0	0.3	1.4	0.5	NQ	0.4	0.7	0.5	0.5	0.5	0.3	0.3	0.3	0.2	0.6	NQ
cis-Chlordane	NQ	1.2	1.6	2.3	2.7	1.0	1.2	1.4	0.8	0.8	0.8	1.0	0.5	1.1	0.6	NQ	0.6	0.8	0.8	1.0	0.7	0.4	0.5	0.7	0.3	0.6	0.3
trans-Nonachlor	NQ	0.7	0.9	1.7	1.3	0.6	0.8	1.0	0.6	0.5	0.6	0.9	0.4	0.6	0.4	NQ	0.3	0.5	0.5	0.6	0.4	0.2	0.3	0.4	0.2	0.8	0.4
cis-Nonachlor	NQ	0.7	1.0	2.1	1.3	0.5	1.2	1.0	0.5	0.5	1.9	1.3	0.4	0.7	0.4	NQ	0.3	0.6	0.6	0.6	0.5	0.3	0.3	0.4	0.2	1.0	NQ
Σ_4Chlordanes	NQ	1.0	1.3	2.5	2.2	0.9	1.1	1.3	0.6	0.6	0.8	1.0	NQ	0.9	NQ	NQ	0.4	0.7	0.6	0.7	0.5	0.3	0.4	0.4	0.2	0.7	NQ

N.Q (not quantified): coastal site concentration < MDL (this study)

N.D (not detected): background concentration < MDL [1]

[1)] Sum of seven PCBs

[2)] Sum of six PAHs (fluorene, phenanthrene, anthracene, fluoranthene, pyrene, chrysene)

[3)] Sum of two HCHs (α and γ-HCH)

[4)] Sum of two DDTs (*o,p`* and *p,p`*-DDT)

Table S7c) Concentrations in coastal zones divided by the minimum Norwegian background concentrations (R_{NWmin}).

	Coastal sites																									
Compounds	**Oslo**	**Holmestrand**	**Tønsberg**	**Nøtterøy**	**Kragerø**	**Arendal**	**Kristiansand I**	**Kristiansand II**	**Farsund**	**Fedafjorden**	**Flekkefjord**	**Stavanger**	**Sauda**	**Bergen I**	**Bergen II**	**Sunndalsøra**	**Trondheim I**	**Trondheim II**	**Hommelvik**	**Brønnøysund**	**Mo i Rana**	**Narvik I**	**Narvik II**	**Ramsundet**	**Harstad**	**Tromsø I**	**Tromsø II**
PCB-28	17.6	8.9	6.9	7.1	14.1	5.9	5.1	15.3	3.5	18.2	3.4	12.1	4.9	16.5	6.4	2.4	5.0	13.8	4.6	4.2	9.1	7.9	2.7	1.9	3.0	15.7	5.2
PCB-52	22.9	8.5	6.9	8.5	10.4	4.3	5.5	20.3	3.3	8.0	3.0	17.0	7.3	29.3	9.4	1.7	9.7	9.6	3.7	3.5	4.5	6.4	2.4	1.7	3.0	13.5	4.8
PCB-101	32.2	11.2	9.3	11.8	10.5	5.1	6.9	37.6	4.7	7.6	4.1	24.9	13.7	46.9	7.6	2.2	15.9	13.6	5.7	5.7	5.2	8.1	3.1	2.8	3.5	30.0	6.5
PCB-118	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D
PCB-138	21.8	12.9	10.5	14.8	13.8	6.7	7.6	36.4	5.9	7.3	4.2	24.0	11.9	43.9	6.1	NQ	12.8	14.5	10.0	8.1	6.6	7.0	NQ	4.2	4.8	27.0	4.8
PCB-153	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D
PCB-180	13.9	10.5	11.3	9.6	15.8	7.6	7.5	23.7	5.5	7.2	3.9	18.4	5.4	28.6	5.9	NQ	8.5	12.1	9.6	9.3	6.4	4.3	NQ	3.5	4.5	23.8	3.8
Σ_7PCBs[1)]	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D
Fluorene	11.9	11.4	8.8	9.5	6.3	28.7	8.2	17.7	6.4	29.8	11.5	12.2	27.4	18.8	13.5	20.7	22.1	20.0	170.7	6.8	8.1	20.6	8.3	2.3	7.3	24.3	21.1
Phenanthrene	16.0	9.4	7.7	7.7	4.8	11.3	7.7	13.4	5.3	40.6	7.4	14.8	19.4	18.7	11.9	14.6	20.4	19.3	104.4	7.3	10.4	14.4	7.3	1.4	4.0	18.1	16.2
Anthracene	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D
Fluoranthene	7.2	9.7	8.2	6.4	5.4	12.1	9.2	19.0	7.7	82.7	6.6	24.8	46.2	19.6	10.9	8.1	22.3	20.6	80.6	8.6	13.1	13.6	7.3	1.5	3.5	16.6	13.3
Pyrene	7.4	13.5	10.8	7.6	6.3	15.9	11.7	27.6	8.3	109.0	6.8	32.8	62.8	28.6	10.6	6.0	23.0	25.6	73.2	11.3	16.2	20.7	10.1	2.0	5.5	32.4	25.3
Benzo[a]pyrene	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D
Benz[a]anthracene	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D
Chrysene	7.7	7.8	9.4	7.5	5.7	11.4	15.9	35.0	11.7	44.9	6.1	34.7	32.6	19.0	7.9	3.2	10.6	15.8	13.6	8.8	12.0	9.0	6.8	2.5	3.4	18.5	11.2
Σ_6PAHs[2)]	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D
α-HCH	3.2	3.8	3.9	3.3	3.5	2.9	3.3	4.6	3.7	3.7	3.1	3.8	2.9	3.7	2.9	2.8	2.7	3.8	3.6	3.7	2.9	2.8	3.3	3.2	2.5	4.7	4.8
β-HCH	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D
γ-HCH	10.4	24.5	11.7	11.4	12.2	11.6	10.4	15.6	10.1	13.3	8.5	18.9	11.3	76.7	9.1	4.6	5.9	9.7	8.8	6.2	4.6	5.4	3.9	3.0	5.1	4.6	5.8
Σ_2HCHs[3)]	5.0	8.9	5.9	5.3	5.7	5.0	5.0	7.3	5.3	6.1	4.5	7.5	4.9	21.7	4.4	3.2	3.5	5.3	4.9	4.3	3.3	3.5	3.5	3.1	3.1	4.7	5.0
HCB	1.7	1.9	1.7	1.8	2.0	1.7	2.0	12.0	1.9	1.9	1.7	1.7	1.6	2.2	1.7	1.7	1.8	2.2	2.1	1.8	2.1	2.0	2.8	2.1	1.8	2.4	2.2
p,p'-DDE	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D
p,p'-DDD	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D

	Coastal sites																									
Compounds	**Oslo**	**Holmestrand**	**Tønsberg**	**Nøtterøy**	**Kragerø**	**Arendal**	**Kristiansand I**	**Kristiansand II**	**Farsund**	**Fedafjorden**	**Flekkefjord**	**Stavanger**	**Sauda**	**Bergen I**	**Bergen II**	**Sunndalsøra**	**Trondheim I**	**Trondheim II**	**Hommelvik**	**Brønnøysund**	**Mo i Rana**	**Narvik I**	**Narvik II**	**Ramsundet**	**Harstad**	**Tromsø I**	**Tromsø II**
o,p'-DDT	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D
p,p'-DDT	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D
Σ_2DDTs[4]	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D
trans-Chlordane	NQ	9.6	12.9	31.7	27.6	10.2	10.5	14.8	3.7	3.6	5.6	6.5	2.3	8.9	3.5	NQ	2.4	4.5	3.3	3.0	3.1	2.0	2.0	1.6	1.2	3.9	NQ
cis-Chlordane	NQ	4.1	5.8	8.1	9.5	3.4	4.2	4.9	2.8	2.9	2.8	3.6	1.8	3.9	2.3	NQ	2.1	2.9	2.9	3.6	2.3	1.5	1.9	2.3	1.2	2.2	1.2
trans-Nonachlor	NQ	3.3	4.3	8.0	6.0	2.7	3.8	4.5	2.7	2.6	2.7	4.0	1.8	2.8	2.0	NQ	1.4	2.6	2.4	2.6	1.8	1.2	1.4	1.7	0.8	3.8	2.0
cis-Nonachlor	NQ	4.7	6.6	14.5	8.6	3.5	8.0	6.5	3.6	3.5	12.9	8.9	2.5	4.5	3.0	NQ	2.0	3.9	3.7	3.8	3.3	1.7	2.3	2.6	1.0	7.0	NQ
Σ_4Chlordanes	NQ	4.5	6.0	11.2	10.2	4.0	5.0	6.0	2.9	2.9	3.6	4.4	NQ	4.1	NQ	NQ	1.9	3.0	2.8	3.1	2.2	1.4	1.7	2.0	1.0	3.3	NQ

N.Q (not quantified): coastal site concentration < MDL (this study)

N.D (not detected): background concentration < MDL [1]

[1)] Sum of seven PCBs

[2)] Sum of six PAHs (fluorene, phenanthrene, anthracene, fluoranthene, pyrene, chrysene)

[3)] Sum of two HCHs (α and γ-HCH)

[4)] Sum of two DDTs (*o,p`* and *p,p`*-DDT)

Table S8a) Concentrations in coastal zones divided by the median Nordic background concentrations (R_{ND}).

	Coastal sites																									
Compounds	**Oslo**	**Holmestrand**	**Tønsberg**	**Nøtterøy**	**Kragerø**	**Arendal**	**Kristiansand I**	**Kristiansand II**	**Farsund**	**Fedafjorden**	**Flekkefjord**	**Stavanger**	**Sauda**	**Bergen I**	**Bergen II**	**Sunndalsøra**	**Trondheim I**	**Trondheim II**	**Hommelvik**	**Brønnøysund**	**Mo i Rana**	**Narvik I**	**Narvik II**	**Ramsundet**	**Harstad**	**Tromsø I**	**Tromsø II**
PCB-28	5.1	2.6	2.0	2.1	4.1	1.7	1.5	4.5	1.0	5.3	1.0	3.6	1.4	4.8	1.9	0.7	1.5	4.0	1.4	1.2	2.7	2.3	0.8	0.5	0.9	4.6	1.5
PCB-52	7.8	2.9	2.4	2.9	3.6	1.5	1.9	6.9	1.1	2.7	1.0	5.8	2.5	10.0	3.2	0.6	3.3	3.3	1.3	1.2	1.5	2.2	0.8	0.6	1.0	4.6	1.6
PCB-101	7.7	2.7	2.2	2.8	2.5	1.2	1.7	9.0	1.1	1.8	1.0	6.0	3.3	11.2	1.8	0.5	3.8	3.3	1.4	1.4	1.2	1.9	0.8	0.7	0.8	7.2	1.5
PCB-118	6.8	3.3	2.2	3.9	2.5	1.2	1.8	13.5	1.1	1.7	0.8	6.5	4.8	12.4	2.1	NQ	3.5	3.4	1.5	1.3	1.5	2.0	0.8	NQ	0.9	4.3	1.3
PCB-138	3.6	2.1	1.7	2.4	2.3	1.1	1.2	5.9	1.0	1.2	0.7	3.9	2.0	7.2	1.0	NQ	2.1	2.4	1.6	1.3	1.1	1.1	NQ	0.7	0.8	4.4	0.8
PCB-153	3.5	1.9	1.7	2.0	2.2	1.2	1.2	4.9	1.0	1.2	0.7	3.6	1.5	6.3	1.0	NQ	1.9	2.2	1.5	1.4	0.9	1.1	NQ	NQ	0.8	4.4	0.8
PCB-180	2.5	1.9	2.0	1.7	2.8	1.4	1.4	4.3	1.0	1.3	0.7	3.3	1.0	5.1	1.1	NQ	1.5	2.2	1.7	1.7	1.1	0.8	NQ	0.6	0.8	4.3	0.7
Σ_7PCBs[1)]	5.9	2.5	2.1	2.5	3.0	1.4	1.6	6.7	1.1	2.6	0.9	4.8	2.3	8.2	1.9	NQ	2.6	3.1	1.4	1.3	1.6	1.8	NQ	NQ	0.9	5.0	1.3
Fluorene	3.3	3.2	2.4	2.6	1.8	8.0	2.3	4.9	1.8	8.3	3.2	3.4	7.6	5.2	3.7	5.8	6.1	5.6	47.5	1.9	2.3	5.7	2.3	0.6	2.0	6.8	5.9
Phenanthrene	4.2	2.5	2.0	2.0	1.3	3.0	2.0	3.5	1.4	10.8	2.0	3.9	5.2	5.0	3.2	3.9	5.4	5.1	27.7	1.9	2.8	3.8	1.9	0.4	1.0	4.8	4.3
Anthracene	4.4	4.4	4.8	3.2	3.1	30.0	4.2	14.2	1.9	50.2	2.3	7.1	19.2	13.3	3.7	5.0	17.4	13.6	100.4	6.1	9.4	18.2	7.3	NQ	4.4	19.1	26.7
Fluoranthene	2.1	2.9	2.4	1.9	1.6	3.6	2.7	5.6	2.3	24.4	1.9	7.3	13.6	5.8	3.2	2.4	6.6	6.1	23.7	2.5	3.8	4.0	2.1	0.4	1.0	4.9	3.9
Pyrene	2.5	4.6	3.7	2.6	2.2	5.4	4.0	9.4	2.8	37.2	2.3	11.2	21.4	9.7	3.6	2.1	7.9	8.7	25.0	3.8	5.5	7.0	3.4	0.7	1.9	11.1	8.6
Benzo[a]pyrene	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D
Benz[a]anthracene	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D
Chrysene	3.7	3.8	4.6	3.6	2.7	5.5	7.7	16.9	5.7	21.7	2.9	16.8	15.8	9.2	3.8	1.5	5.1	7.6	6.6	4.2	5.8	4.4	3.3	1.2	1.6	9.0	5.4
Σ_6PAHs[2)]	3.7	2.8	2.3	2.2	1.5	4.7	2.3	4.5	1.7	12.9	2.3	4.5	7.5	5.4	3.3	4.1	5.9	5.6	32.8	2.1	2.9	4.6	2.2	NQ	1.4	5.7	5.0
α-HCH	1.7	2.0	2.1	1.8	1.9	1.5	1.8	2.4	2.0	2.0	1.7	2.0	1.5	2.0	1.6	1.5	1.4	2.0	1.9	2.0	1.6	1.5	1.8	1.7	1.3	2.5	2.6
β-HCH	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D
γ-HCH	3.1	7.4	3.5	3.4	3.7	3.5	3.1	4.7	3.0	4.0	2.6	5.7	3.4	23.1	2.7	1.4	1.8	2.9	2.6	1.9	1.4	1.6	1.2	0.9	1.5	1.4	1.7
Σ_2HCHs[3)]	2.2	4.0	2.6	2.4	2.5	2.3	2.3	3.3	2.4	2.7	2.0	3.4	2.2	9.7	2.0	1.4	1.6	2.4	2.2	1.9	1.5	1.5	1.6	1.4	1.4	2.1	2.3
HCB	1.0	1.2	1.0	1.1	1.2	1.0	1.2	7.3	1.1	1.1	1.1	1.0	1.0	1.3	1.0	1.1	1.1	1.3	1.2	1.1	1.3	1.2	1.7	1.3	1.1	1.4	1.4
p,p'-DDE	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D
p,p'-DDD	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D

	Coastal sites																									
Compounds	**Oslo**	**Holmestrand**	**Tønsberg**	**Nøtterøy**	**Kragerø**	**Arendal**	**Kristiansand I**	**Kristiansand II**	**Farsund**	**Fedafjorden**	**Flekkefjord**	**Stavanger**	**Sauda**	**Bergen I**	**Bergen II**	**Sunndalsøra**	**Trondheim I**	**Trondheim II**	**Hommelvik**	**Brønnøysund**	**Mo i Rana**	**Narvik I**	**Narvik II**	**Ramsundet**	**Harstad**	**Tromsø I**	**Tromsø II**
o,p'-DDT	3.6	4.9	6.1	5.7	4.2	2.6	2.9	7.4	4.3	3.9	3.5	5.4	2.0	31.0	2.6	1.5	1.8	2.9	2.2	1.9	NQ	NQ	1.3	1.2	NQ	1.3	2.0
p,p'-DDT	5.2	7.1	8.1	8.1	5.5	3.6	3.7	10.3	5.4	4.7	5.0	8.0	2.2	83.9	3.4	1.4	2.3	3.2	2.1	1.9	NQ	NQ	NQ	1.0	NQ	1.5	2.1
Σ_2DDTs[4)]	4.4	5.9	7.0	6.8	4.8	3.1	3.3	8.7	4.8	4.3	4.2	6.6	2.1	55.4	3.0	1.5	2.0	3.0	2.2	1.9	NQ	NQ	NQ	1.1	NQ	1.4	NQ
trans-Chlordane	NQ	3.5	4.7	11.4	10.0	3.7	3.8	5.3	1.3	1.3	2.0	2.3	0.8	3.2	1.3	NQ	0.9	1.6	1.2	1.1	1.1	0.7	0.7	0.6	0.4	1.4	NQ
cis-Chlordane	NQ	2.3	3.1	4.4	5.1	1.9	2.3	2.7	1.5	1.6	1.5	2.0	1.0	2.1	1.2	NQ	1.1	1.6	1.6	2.0	1.3	0.8	1.0	1.3	0.7	1.2	0.7
trans-Nonachlor	NQ	1.8	2.3	4.3	3.2	1.5	2.0	2.4	1.5	1.4	1.5	2.2	1.0	1.5	1.1	NQ	0.8	1.4	1.3	1.4	1.0	0.6	0.7	0.9	0.4	2.0	1.1
cis-Nonachlor	NQ	2.4	3.3	7.2	4.3	1.8	4.0	3.3	1.8	1.7	6.4	4.5	1.3	2.3	1.5	NQ	1.0	1.9	1.9	1.9	1.6	0.8	1.1	1.3	0.5	3.5	NQ
Σ_4Chlordanes	NQ	2.3	3.1	5.7	5.2	2.0	2.5	3.1	1.5	1.5	1.8	2.2	NQ	2.1	NQ	NQ	0.9	1.5	1.4	1.6	1.1	0.7	0.9	1.0	0.5	1.7	NQ

N.Q (not quantified): coastal site concentration < MDL (this study)

N.D (not detected): background concentration < MDL [1]

[1)] Sum of seven PCBs

[2)] Sum of six PAHs (fluorene, phenanthrene, anthracene, fluoranthene, pyrene, chrysene)

[3)] Sum of two HCHs (α and γ-HCH)

[4)] Sum of two DDTs (*o,p`* and *p,p`*-DDT)

Table S8b) Concentrations in coastal zones divided by the maximum Nordic background concentrations (R_{NDmax}).

	Coastal sites																									
Compounds	**Oslo**	**Holmestrand**	**Tønsberg**	**Nøtterøy**	**Kragerø**	**Arendal**	**Kristiansand I**	**Kristiansand II**	**Farsund**	**Fedafjorden**	**Flekkefjord**	**Stavanger**	**Sauda**	**Bergen I**	**Bergen II**	**Sunndalsøra**	**Trondheim I**	**Trondheim II**	**Hommelvik**	**Brønnøysund**	**Mo i Rana**	**Narvik I**	**Narvik II**	**Ramsundet**	**Harstad**	**Tromsø I**	**Tromsø II**
PCB-28	1.5	0.8	0.6	0.6	1.2	0.5	0.4	1.3	0.3	1.6	0.3	1.1	0.4	1.5	0.6	0.2	0.4	1.2	0.4	0.4	0.8	0.7	0.2	0.2	0.3	1.4	0.5
PCB-52	2.1	0.8	0.6	0.8	1.0	0.4	0.5	1.9	0.3	0.7	0.3	1.6	0.7	2.7	0.9	0.2	0.9	0.9	0.3	0.3	0.4	0.6	0.2	0.2	0.3	1.3	0.4
PCB-101	1.1	0.4	0.3	0.4	0.4	0.2	0.2	1.3	0.2	0.3	0.1	0.9	0.5	1.6	0.3	0.1	0.5	0.5	0.2	0.2	0.2	0.3	0.1	0.1	0.1	1.0	0.2
PCB-118	0.8	0.4	0.3	0.5	0.3	0.1	0.2	1.7	0.1	0.2	0.1	0.8	0.6	1.5	0.3	NQ	0.4	0.4	0.2	0.2	0.2	0.2	0.1	NQ	0.1	0.5	0.2
PCB-138	0.5	0.3	0.2	0.3	0.3	0.1	0.2	0.8	0.1	0.2	0.1	0.5	0.3	1.0	0.1	NQ	0.3	0.3	0.2	0.2	0.1	0.2	NQ	0.1	0.1	0.6	0.1
PCB-153	0.5	0.3	0.2	0.3	0.3	0.2	0.2	0.7	0.1	0.2	0.1	0.5	0.2	0.9	0.1	NQ	0.3	0.3	0.2	0.2	0.1	0.2	NQ	NQ	0.1	0.7	0.1
PCB-180	0.3	0.2	0.2	0.2	0.3	0.1	0.1	0.4	0.1	0.1	0.1	0.3	0.1	0.5	0.1	NQ	0.2	0.2	0.2	0.2	0.1	0.1	NQ	0.1	0.1	0.4	0.1
Σ_7PCBs[1)]	1.1	0.5	0.4	0.5	0.5	0.2	0.3	1.2	0.2	0.5	0.2	0.9	0.4	1.5	0.3	NQ	0.5	0.6	0.3	0.2	0.3	0.3	NQ	NQ	0.2	0.9	0.2
Fluorene	0.4	0.4	0.3	0.3	0.2	0.9	0.3	0.6	0.2	0.9	0.4	0.4	0.9	0.6	0.4	0.6	0.7	0.6	5.3	0.2	0.3	0.6	0.3	0.1	0.2	0.8	0.7
Phenanthrene	0.9	0.5	0.4	0.4	0.3	0.7	0.4	0.8	0.3	2.3	0.4	0.9	1.1	1.1	0.7	0.8	1.2	1.1	6.0	0.4	0.6	0.8	0.4	0.1	0.2	1.0	0.9
Anthracene	0.6	0.6	0.7	0.4	0.4	4.2	0.6	2.0	0.3	7.0	0.3	1.0	2.7	1.8	0.5	0.7	2.4	1.9	13.9	0.8	1.3	2.5	1.0	NQ	0.6	2.7	3.7
Fluoranthene	0.4	0.5	0.5	0.4	0.3	0.7	0.5	1.0	0.4	4.5	0.4	1.4	2.5	1.1	0.6	0.4	1.2	1.1	4.4	0.5	0.7	0.7	0.4	0.1	0.2	0.9	0.7
Pyrene	0.4	0.8	0.6	0.4	0.4	0.9	0.7	1.6	0.5	6.3	0.4	1.9	3.6	1.6	0.6	0.3	1.3	1.5	4.2	0.6	0.9	1.2	0.6	0.1	0.3	1.9	1.5
Benzo[a]pyrene	NQ	NQ	NQ	NQ	NQ	NQ	NQ	0.2	NQ	0.2	NQ	NQ	NQ	NQ	NQ	NQ	NQ	NQ	NQ	NQ	0.2	NQ	NQ	NQ	NQ	NQ	NQ
Benz[a]anthracene	NQ	0.2	0.3	0.2	NQ	0.6	0.4	1.0	0.2	2.4	0.2	0.6	0.9	0.6	0.2	NQ	0.3	0.5	0.6	0.4	0.5	0.4	0.3	NQ	NQ	0.8	0.5
Chrysene	0.3	0.3	0.4	0.3	0.3	0.5	0.7	1.6	0.5	2.0	0.3	1.6	1.5	0.8	0.4	0.1	0.5	0.7	0.6	0.4	0.5	0.4	0.3	0.1	0.2	0.8	0.5
Σ_6PAHs[2)]	0.6	0.5	0.4	0.4	0.3	0.8	0.4	0.8	0.3	2.2	0.4	0.8	1.3	0.9	0.6	0.7	1.0	0.9	5.5	0.4	0.5	0.8	0.4	NQ	0.2	1.0	0.8
α-HCH	0.9	1.0	1.1	0.9	0.9	0.8	0.9	1.2	1.0	1.0	0.8	1.0	0.8	1.0	0.8	0.7	0.7	1.0	1.0	1.0	0.8	0.7	0.9	0.9	0.7	1.3	1.3
β-HCH	0.2	0.3	0.4	0.4	0.4	0.3	0.3	0.5	0.3	0.3	0.2	0.4	0.1	0.3	0.2	NQ	NQ	0.2	0.2	0.2	NQ	NQ	NQ	NQ	NQ	0.2	NQ
γ-HCH	1.0	2.4	1.1	1.1	1.2	1.1	1.0	1.5	1.0	1.3	0.8	1.8	1.1	7.4	0.9	0.4	0.6	0.9	0.8	0.6	0.4	0.5	0.4	0.3	0.5	0.4	0.6
Σ_2HCHs[3)]	0.9	1.6	1.1	1.0	1.1	0.9	0.9	1.4	1.0	1.1	0.8	1.4	0.9	4.0	0.8	0.6	0.7	1.0	0.9	0.8	0.6	0.6	0.6	0.6	0.6	0.9	0.9
HCB	0.5	0.6	0.5	0.6	0.6	0.5	0.6	3.8	0.6	0.6	0.6	0.5	0.5	0.7	0.5	0.6	0.6	0.7	0.7	0.6	0.7	0.6	0.9	0.7	0.6	0.8	0.7
p,p'-DDE	0.3	0.6	0.6	0.4	0.3	NQ	0.4	0.5	0.4	0.3	0.3	0.4	NQ	0.7	NQ	NQ	NQ	0.3	NQ	NQ	NQ	NQ	NQ	NQ	NQ	NQ	NQ
p,p'-DDD	NQ	NQ	0.8	NQ	NQ	NQ	NQ	0.9	NQ	NQ	NQ	NQ	NQ	3.1	NQ	NQ	NQ	NQ	NQ	NQ	NQ	NQ	NQ	NQ	NQ	NQ	NQ

	Coastal sites																									
Compounds	**Oslo**	**Holmestrand**	**Tønsberg**	**Nøtterøy**	**Kragerø**	**Arendal**	**Kristiansand I**	**Kristiansand II**	**Farsund**	**Fedafjorden**	**Flekkefjord**	**Stavanger**	**Sauda**	**Bergen I**	**Bergen II**	**Sunndalsøra**	**Trondheim I**	**Trondheim II**	**Hommelvik**	**Brønnøysund**	**Mo i Rana**	**Narvik I**	**Narvik II**	**Ramsundet**	**Harstad**	**Tromsø I**	**Tromsø II**
o,p'-DDT	0.4	0.6	0.7	0.7	0.5	0.3	0.3	0.8	0.5	0.5	0.4	0.6	0.2	3.6	0.3	0.2	0.2	0.3	0.3	0.2	NQ	NQ	0.1	0.1	NQ	0.2	0.2
p,p'-DDT	0.4	0.5	0.6	0.6	0.4	0.3	0.3	0.8	0.4	0.4	0.4	0.6	0.2	6.3	0.3	0.1	0.2	0.2	0.2	0.1	NQ	NQ	NQ	0.1	NQ	0.1	0.2
Σ_2DDTs[4)]	0.4	0.5	0.6	0.6	0.4	0.3	0.3	0.8	0.4	0.4	0.4	0.6	0.2	5.1	0.3	0.1	0.2	0.3	0.2	0.2	NQ	NQ	NQ	0.1	NQ	0.1	NQ
trans-Chlordane	NQ	1.5	2.0	4.8	4.2	1.6	1.6	2.3	0.6	0.5	0.8	1.0	0.3	1.4	0.5	NQ	0.4	0.7	0.5	0.5	0.5	0.3	0.3	0.3	0.2	0.6	NQ
cis-Chlordane	NQ	1.0	1.4	1.9	2.2	0.8	1.0	1.2	0.7	0.7	0.7	0.8	0.4	0.9	0.5	NQ	0.5	0.7	0.7	0.9	0.5	0.4	0.4	0.6	0.3	0.5	0.3
trans-Nonachlor	NQ	0.7	0.9	1.7	1.3	0.6	0.8	1.0	0.6	0.5	0.6	0.9	0.4	0.6	0.4	NQ	0.3	0.5	0.5	0.6	0.4	0.2	0.3	0.4	0.2	0.8	0.4
cis-Nonachlor	NQ	0.5	0.8	1.7	1.0	0.4	0.9	0.7	0.4	0.4	1.5	1.0	0.3	0.5	0.3	NQ	0.2	0.4	0.4	0.4	0.4	0.2	0.3	0.3	0.1	0.8	NQ
Σ_4Chlordanes	NQ	0.9	1.2	2.3	2.1	0.8	1.0	1.2	0.6	0.6	0.7	0.9	NQ	0.8	NQ	NQ	0.4	0.6	0.6	0.6	0.5	0.3	0.3	0.4	0.2	0.7	NQ

N.Q (not quantified): coastal site concentration < MDL (this study)

[1)] Sum of seven PCBs

[2)] Sum of six PAHs (fluorene, phenanthrene, anthracene, fluoranthene, pyrene, chrysene)

[3)] Sum of two HCHs (α and γ-HCH)

[4)] Sum of two DDTs (*o,p`* and *p,p`*-DDT)

Table S8c) Concentrations in coastal zones divided by the minimum Nordic background concentrations (R_{NDmin}).

	Coastal sites																									
Compounds	**Oslo**	**Holmestrand**	**Tønsberg**	**Nøtterøy**	**Kragerø**	**Arendal**	**Kristiansand I**	**Kristiansand II**	**Farsund**	**Fedafjorden**	**Flekkefjord**	**Stavanger**	**Sauda**	**Bergen I**	**Bergen II**	**Sunndalsøra**	**Trondheim I**	**Trondheim II**	**Hommelvik**	**Brønnøysund**	**Mo i Rana**	**Narvik I**	**Narvik II**	**Ramsundet**	**Harstad**	**Tromsø I**	**Tromsø II**
PCB-28	17.6	8.9	6.9	7.1	14.1	5.9	5.1	15.3	3.5	18.2	3.4	12.1	4.9	16.5	6.4	2.4	5.0	13.8	4.6	4.2	9.1	7.9	2.7	1.9	3.0	15.7	5.2
PCB-52	22.9	8.5	6.9	8.5	10.4	4.3	5.5	20.3	3.3	8.0	3.0	17.0	7.3	29.3	9.4	1.7	9.7	9.6	3.7	3.5	4.5	6.4	2.4	1.7	3.0	13.5	4.8
PCB-101	32.2	11.2	9.3	11.8	10.5	5.1	6.9	37.6	4.7	7.6	4.1	24.9	13.7	46.9	7.6	2.2	15.9	13.6	5.7	5.7	5.2	8.1	3.1	2.8	3.5	30.0	6.5
PCB-118	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D
PCB-138	21.8	12.9	10.5	14.8	13.8	6.7	7.6	36.4	5.9	7.3	4.2	24.0	11.9	43.9	6.1	NQ	12.8	14.5	10.0	8.1	6.6	7.0	NQ	4.2	4.8	27.0	4.8
PCB-153	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D
PCB-180	13.9	10.5	11.3	9.6	15.8	7.6	7.5	23.7	5.5	7.2	3.9	18.4	5.4	28.6	5.9	NQ	8.5	12.1	9.6	9.3	6.4	4.3	NQ	3.5	4.5	23.8	3.8
Σ_7PCBs[1)]	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D
Fluorene	12.1	11.6	8.9	9.7	6.4	29.1	8.3	18.0	6.5	30.3	11.7	12.4	27.9	19.1	13.7	21.1	22.4	20.3	173.5	6.9	8.3	20.9	8.4	2.3	7.5	24.7	21.4
Phenanthrene	18.6	11.0	8.9	8.9	5.5	13.2	8.9	15.6	6.2	47.1	8.6	17.2	22.6	21.7	13.8	16.9	23.7	22.5	121.3	8.5	12.1	16.7	8.5	1.7	4.6	21.0	18.9
Anthracene	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D
Fluoranthene	7.3	9.9	8.4	6.6	5.5	12.3	9.5	19.4	7.9	84.6	6.7	25.4	47.2	20.0	11.1	8.2	22.8	21.1	82.4	8.8	13.4	13.9	7.4	1.5	3.6	16.9	13.6
Pyrene	8.0	14.5	11.7	8.2	6.8	17.1	12.6	29.7	9.0	117.4	7.3	35.3	67.7	30.8	11.4	6.5	24.8	27.5	78.9	12.1	17.5	22.3	10.9	2.2	6.0	35.0	27.2
Benzo[a]pyrene	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D
Benz[a]anthracene	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D
Chrysene	7.9	8.0	9.6	7.6	5.8	11.7	16.3	35.9	12.0	46.0	6.2	35.6	33.4	19.5	8.1	3.2	10.9	16.2	14.0	9.0	12.3	9.2	6.9	2.6	3.5	19.0	11.5
Σ_6PAHs[2)]	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D
α-HCH	3.4	3.9	4.1	3.5	3.6	3.0	3.4	4.7	3.8	3.8	3.2	3.9	3.0	3.8	3.0	2.9	2.8	3.9	3.8	3.8	3.0	2.9	3.5	3.3	2.5	4.9	5.0
β-HCH	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D
γ-HCH	10.4	24.5	11.7	11.4	12.2	11.6	10.4	15.6	10.1	13.3	8.5	18.9	11.3	76.7	9.1	4.6	5.9	9.7	8.8	6.2	4.6	5.4	3.9	3.0	5.1	4.6	5.8
Σ_2HCHs[3)]	5.1	9.1	6.0	5.5	5.8	5.2	5.2	7.5	5.4	6.2	4.6	7.7	5.1	22.2	4.6	3.3	3.6	5.4	5.0	4.4	3.4	3.5	3.6	3.2	3.2	4.8	5.2
HCB	1.7	2.0	1.7	1.8	2.0	1.7	2.1	12.2	1.9	1.9	1.8	1.7	1.7	2.2	1.7	1.8	1.8	2.2	2.1	1.9	2.1	2.0	2.8	2.1	1.9	2.4	2.3
p,p'-DDE	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D
p,p'-DDD	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D

	Coastal sites																									
Compounds	**Oslo**	**Holmestrand**	**Tønsberg**	**Nøtterøy**	**Kragerø**	**Arendal**	**Kristiansand I**	**Kristiansand II**	**Farsund**	**Fedafjorden**	**Flekkefjord**	**Stavanger**	**Sauda**	**Bergen I**	**Bergen II**	**Sunndalsøra**	**Trondheim I**	**Trondheim II**	**Hommelvik**	**Brønnøysund**	**Mo i Rana**	**Narvik I**	**Narvik II**	**Ramsundet**	**Harstad**	**Tromsø I**	**Tromsø II**
o,p'-DDT	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D
p,p'-DDT	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D
Σ_2DDTs[4)]	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D
trans-Chlordane	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D
cis-Chlordane	NQ	6.1	8.5	12.0	14.0	5.1	6.3	7.3	4.2	4.3	4.1	5.3	2.6	5.8	3.3	NQ	3.1	4.3	4.3	5.3	3.4	2.3	2.8	3.5	1.8	3.3	1.8
trans-Nonachlor	NQ	4.9	6.4	11.8	8.9	4.1	5.6	6.7	4.0	3.8	4.1	6.0	2.7	4.2	3.0	NQ	2.1	3.8	3.6	3.9	2.7	1.7	2.1	2.5	1.2	5.6	3.0
cis-Nonachlor	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D
Σ_4Chlordanes	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D

N.Q (not quantified): coastal site concentration < MDL (this study)

N.D (not detected): background concentration < MDL [1]

[1)] Sum of seven PCBs

[2)] Sum of six PAHs (fluorene, phenanthrene, anthracene, fluoranthene, pyrene, chrysene)

[3)] Sum of two HCHs (α and γ-HCH)

[4)] Sum of two DDTs (*o,p`* and *p,p`*-DDT)

Table S9a) Concentrations in coastal zones divided by the median European background concentrations (R_{EU}).

	Coastal sites																									
Compounds	**Oslo**	**Holmestrand**	**Tønsberg**	**Nøtterøy**	**Kragerø**	**Arendal**	**Kristiansand I**	**Kristiansand II**	**Farsund**	**Fedafjorden**	**Flekkefjord**	**Stavanger**	**Sauda**	**Bergen I**	**Bergen II**	**Sunndalsøra**	**Trondheim I**	**Trondheim II**	**Hommelvik**	**Brønnøysund**	**Mo i Rana**	**Narvik I**	**Narvik II**	**Ramsundet**	**Harstad**	**Tromsø I**	**Tromsø II**
PCB-28	2.6	1.3	1.0	1.0	2.1	0.9	0.7	2.2	0.5	2.7	0.5	1.8	0.7	2.4	0.9	0.3	0.7	2.0	0.7	0.6	1.3	1.2	0.4	0.3	0.4	2.3	0.8
PCB-52	4.0	1.5	1.2	1.5	1.8	0.7	0.9	3.5	0.6	1.4	0.5	2.9	1.3	5.1	1.6	0.3	1.7	1.7	0.6	0.6	0.8	1.1	0.4	0.3	0.5	2.3	0.8
PCB-101	5.2	1.8	1.5	1.9	1.7	0.8	1.1	6.0	0.7	1.2	0.7	4.0	2.2	7.5	1.2	0.4	2.5	2.2	0.9	0.9	0.8	1.3	0.5	0.4	0.6	4.8	1.0
PCB-118	3.6	1.8	1.2	2.1	1.4	0.6	1.0	7.2	0.6	0.9	0.4	3.5	2.5	6.6	1.1	NQ	1.8	1.8	0.8	0.7	0.8	1.1	0.4	NQ	0.5	2.3	0.7
PCB-138	2.6	1.5	1.2	1.7	1.6	0.8	0.9	4.3	0.7	0.9	0.5	2.8	1.4	5.2	0.7	NQ	1.5	1.7	1.2	0.9	0.8	0.8	NQ	0.5	0.6	3.2	0.6
PCB-153	2.4	1.3	1.2	1.4	1.5	0.8	0.8	3.4	0.7	0.8	0.5	2.5	1.1	4.4	0.7	NQ	1.3	1.5	1.0	1.0	0.6	0.7	NQ	NQ	0.5	3.1	0.5
PCB-180	1.3	1.0	1.1	0.9	1.5	0.7	0.7	2.3	0.5	0.7	0.4	1.8	0.5	2.7	0.6	NQ	0.8	1.2	0.9	0.9	0.6	0.4	NQ	0.3	0.4	2.3	0.4
Σ_7PCBs[1)]	3.4	1.5	1.2	1.5	1.8	0.8	0.9	3.9	0.6	1.5	0.5	2.7	1.3	4.7	1.1	NQ	1.5	1.8	0.8	0.8	0.9	1.1	NQ	NQ	0.5	2.9	0.8
Fluorene	2.3	2.2	1.7	1.9	1.2	5.6	1.6	3.5	1.2	5.8	2.3	2.4	5.4	3.7	2.6	4.1	4.3	3.9	33.4	1.3	1.6	4.0	1.6	0.5	1.4	4.8	4.1
Phenanthrene	3.3	1.9	1.6	1.6	1.0	2.3	1.6	2.7	1.1	8.3	1.5	3.0	4.0	3.8	2.4	3.0	4.2	4.0	21.4	1.5	2.1	2.9	1.5	0.3	0.8	3.7	3.3
Anthracene	2.6	2.6	2.8	1.9	1.8	17.6	2.5	8.4	1.1	29.5	1.3	4.1	11.3	7.8	2.2	2.9	10.2	8.0	59.0	3.6	5.5	10.7	4.3	NQ	2.6	11.2	15.7
Fluoranthene	1.3	1.8	1.5	1.2	1.0	2.3	1.7	3.6	1.4	15.5	1.2	4.7	8.6	3.7	2.0	1.5	4.2	3.9	15.1	1.6	2.4	2.6	1.4	0.3	0.7	3.1	2.5
Pyrene	1.4	2.5	2.0	1.4	1.2	2.9	2.2	5.1	1.5	20.1	1.3	6.1	11.6	5.3	2.0	1.1	4.3	4.7	13.5	2.1	3.0	3.8	1.9	0.4	1.0	6.0	4.7
Benzo[a]pyrene	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D
Benz[a]anthracene	NQ	1.3	1.6	1.1	NQ	3.6	2.4	5.7	1.2	14.3	1.4	3.8	5.2	3.6	1.1	NQ	2.0	3.0	3.5	2.4	3.2	2.5	1.7	NQ	NQ	4.6	3.1
Chrysene	1.4	1.4	1.6	1.3	1.0	2.0	2.8	6.1	2.1	7.9	1.1	6.1	5.7	3.3	1.4	0.6	1.9	2.8	2.4	1.5	2.1	1.6	1.2	0.4	0.6	3.2	2.0
Σ_6PAHs[2)]	2.7	2.0	1.6	1.6	1.1	3.4	1.6	3.2	1.2	9.3	1.7	3.2	5.4	3.9	2.4	3.0	4.2	4.0	23.6	1.5	2.1	3.3	1.6	NQ	1.0	4.1	3.6
α-HCH	0.7	0.8	0.9	0.7	0.8	0.6	0.7	1.0	0.8	0.8	0.7	0.9	0.6	0.8	0.7	0.6	0.6	0.9	0.8	0.8	0.7	0.6	0.7	0.7	0.5	1.0	1.1
β-HCH	0.4	0.7	0.8	0.8	0.9	0.6	0.6	1.1	0.7	0.6	0.5	0.9	0.3	0.6	0.4	NQ	NQ	0.5	0.5	0.4	NQ	NQ	NQ	NQ	NQ	0.4	NQ
γ-HCH	0.8	1.9	0.9	0.9	0.9	0.9	0.8	1.2	0.8	1.0	0.7	1.5	0.9	5.9	0.7	0.4	0.5	0.7	0.7	0.5	0.4	0.4	0.3	0.2	0.4	0.4	0.4
Σ_2HCHs[3)]	0.8	1.3	0.9	0.8	0.9	0.8	0.8	1.1	0.8	0.9	0.7	1.1	0.8	3.3	0.7	0.5	0.5	0.8	0.7	0.7	0.5	0.5	0.5	0.5	0.5	0.7	0.8
HCB	1.0	1.1	0.9	1.0	1.1	0.9	1.1	6.8	1.0	1.0	1.0	0.9	0.9	1.2	0.9	1.0	1.0	1.2	1.2	1.0	1.2	1.1	1.6	1.2	1.0	1.3	1.3
p,p'-DDE	0.5	1.1	1.0	0.8	0.6	NQ	0.7	0.9	0.8	0.5	0.5	0.8	NQ	1.3	NQ	NQ	NQ	0.5	NQ	NQ	NQ	NQ	NQ	NQ	NQ	NQ	NQ
p,p'-DDD	NQ	NQ	1.6	NQ	NQ	NQ	NQ	1.6	NQ	NQ	NQ	NQ	NQ	5.9	NQ	NQ	NQ	NQ	NQ	NQ	NQ	NQ	NQ	NQ	NQ	NQ	NQ
o,p'-DDT	0.7	1.0	1.2	1.1	0.8	0.5	0.6	1.5	0.8	0.8	0.7	1.1	0.4	6.1	0.5	0.3	0.4	0.6	0.4	0.4	NQ	NQ	0.2	0.2	NQ	0.3	0.4

	Coastal sites																									
Compounds	**Oslo**	**Holmestrand**	**Tønsberg**	**Nøtterøy**	**Kragerø**	**Arendal**	**Kristiansand I**	**Kristiansand II**	**Farsund**	**Fedafjorden**	**Flekkefjord**	**Stavanger**	**Sauda**	**Bergen I**	**Bergen II**	**Sunndalsøra**	**Trondheim I**	**Trondheim II**	**Hommelvik**	**Brønnøysund**	**Mo i Rana**	**Narvik I**	**Narvik II**	**Ramsundet**	**Harstad**	**Tromsø I**	**Tromsø II**
p,p'-DDT	0.8	1.1	1.2	1.2	0.8	0.5	0.6	1.5	0.8	0.7	0.8	1.2	0.3	12.6	0.5	0.2	0.3	0.5	0.3	0.3	NQ	NQ	NQ	0.1	NQ	0.2	0.3
Σ_2DDTs[4)]	0.8	1.0	1.2	1.2	0.8	0.5	0.6	1.5	0.8	0.7	0.7	1.1	0.4	9.6	0.5	0.3	0.3	0.5	0.4	0.3	NQ	NQ	NQ	0.2	NQ	0.2	NQ
trans-Chlordane	NQ	2.7	3.6	8.8	7.7	2.8	2.9	4.1	1.0	1.0	1.5	1.8	0.6	2.5	1.0	NQ	0.7	1.2	0.9	0.8	0.9	0.6	0.5	0.5	0.3	1.1	NQ
cis-Chlordane	NQ	1.5	2.0	2.9	3.3	1.2	1.5	1.7	1.0	1.0	1.0	1.3	0.6	1.4	0.8	NQ	0.7	1.0	1.0	1.3	0.8	0.5	0.7	0.8	0.4	0.8	0.4
trans-Nonachlor	NQ	1.2	1.5	2.8	2.1	1.0	1.3	1.6	1.0	0.9	1.0	1.4	0.6	1.0	0.7	NQ	0.5	0.9	0.9	0.9	0.7	0.4	0.5	0.6	0.3	1.3	0.7
cis-Nonachlor	NQ	1.5	2.1	4.6	2.7	1.1	2.5	2.1	1.1	1.1	4.1	2.8	0.8	1.4	1.0	NQ	0.6	1.2	1.2	1.2	1.0	0.5	0.7	0.8	0.3	2.2	NQ
Σ_4Chlordanes	NQ	1.5	2.1	3.8	3.5	1.4	1.7	2.0	1.0	1.0	1.2	1.5	NQ	1.4	NQ	NQ	0.6	1.0	1.0	1.1	0.8	0.5	0.6	0.7	0.4	1.1	NQ

N.Q (not quantified): coastal site concentration < MDL (this study)

N.D (not detected): background concentration < MDL [1]

[1)] Sum of seven PCBs

[2)] Sum of six PAHs (fluorene, phenanthrene, anthracene, fluoranthene, pyrene, chrysene)

[3)] Sum of two HCHs (α and γ-HCH)

[4)] Sum of two DDTs (*o,p`* and *p,p`*-DDT)

Table S9b) Concentrations in coastal zones divided by the maximum European background concentrations (R_{EUmax}).

	Coastal sites																										
Compounds	**Oslo**	**Holmestrand**	**Tønsberg**	**Nøtterøy**	**Kragerø**	**Arendal**	**Kristiansand I**	**Kristiansand II**	**Farsund**	**Fedafjorden**	**Flekkefjord**	**Stavanger**	**Sauda**	**Bergen I**	**Bergen II**	**Sunndalsøra**	**Trondheim I**	**Trondheim II**	**Hommelvik**	**Brønnøysund**	**Mo i Rana**	**Narvik I**	**Narvik II**	**Ramsundet**	**Harstad**	**Tromsø I**	**Tromsø II**
PCB-28	1.9	1.0	0.7	0.8	1.5	0.6	0.6	1.7	0.4	2.0	0.4	1.3	0.5	1.8	0.7	0.3	0.5	1.5	0.5	0.5	1.0	0.9	0.3	0.2	0.3	1.7	0.6
PCB-52	2.9	1.1	0.9	1.1	1.3	0.6	0.7	2.6	0.4	1.0	0.4	2.2	0.9	3.8	1.2	0.2	1.2	1.2	0.5	0.5	0.6	0.8	0.3	0.2	0.4	1.7	0.6
PCB-101	3.8	1.3	1.1	1.4	1.2	0.6	0.8	4.4	0.6	0.9	0.5	3.0	1.6	5.5	0.9	0.3	1.9	1.6	0.7	0.7	0.6	1.0	0.4	0.3	0.4	3.6	0.8
PCB-118	2.7	1.3	0.9	1.5	1.0	0.5	0.7	5.3	0.4	0.7	0.3	2.6	1.9	4.9	0.8	NQ	1.4	1.3	0.6	0.5	0.6	0.8	0.3	NQ	0.3	1.7	0.5
PCB-138	1.9	1.1	0.9	1.3	1.2	0.6	0.7	3.2	0.5	0.6	0.4	2.1	1.0	3.8	0.5	NQ	1.1	1.3	0.9	0.7	0.6	0.6	NQ	0.4	0.4	2.3	0.4
PCB-153	1.8	1.0	0.9	1.0	1.1	0.6	0.6	2.5	0.5	0.6	0.4	1.9	0.8	3.3	0.5	NQ	1.0	1.1	0.8	0.7	0.5	0.5	NQ	NQ	0.4	2.3	0.4
PCB-180	1.0	0.7	0.8	0.7	1.1	0.5	0.5	1.7	0.4	0.5	0.3	1.3	0.4	2.0	0.4	NQ	0.6	0.9	0.7	0.7	0.4	0.3	NQ	0.2	0.3	1.7	0.3
Σ_7PCBs[1)]	2.5	1.1	0.9	1.1	1.3	0.6	0.7	2.9	0.5	1.1	0.4	2.0	1.0	3.5	0.8	NQ	1.1	1.3	0.6	0.6	0.7	0.8	NQ	NQ	0.4	2.1	0.6
Fluorene	1.7	1.7	1.3	1.4	0.9	4.2	1.2	2.6	0.9	4.3	1.7	1.8	4.0	2.7	2.0	3.0	3.2	2.9	24.7	1.0	1.2	3.0	1.2	0.3	1.1	3.5	3.1
Phenanthrene	2.4	1.4	1.2	1.2	0.7	1.7	1.2	2.0	0.8	6.2	1.1	2.2	2.9	2.8	1.8	2.2	3.1	2.9	15.8	1.1	1.6	2.2	1.1	0.2	0.6	2.7	2.5
Anthracene	1.9	1.9	2.1	1.4	1.3	13.1	1.8	6.2	0.8	21.8	1.0	3.1	8.4	5.8	1.6	2.2	7.6	5.9	43.7	2.6	4.1	7.9	3.2	NQ	1.9	8.3	11.6
Fluoranthene	1.0	1.3	1.1	0.9	0.7	1.7	1.3	2.6	1.1	11.5	0.9	3.4	6.4	2.7	1.5	1.1	3.1	2.9	11.2	1.2	1.8	1.9	1.0	0.2	0.5	2.3	1.8
Pyrene	1.0	1.8	1.5	1.0	0.9	2.2	1.6	3.8	1.1	14.9	0.9	4.5	8.6	3.9	1.5	0.8	3.1	3.5	10.0	1.5	2.2	2.8	1.4	0.3	0.8	4.4	3.5
Benzo[a]pyrene	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D
Benz[a]anthracene	NQ	1.0	1.2	0.8	NQ	2.7	1.8	4.2	0.9	10.6	1.0	2.8	3.8	2.6	0.8	NQ	1.4	2.2	2.6	1.8	2.3	1.9	1.3	NQ	NQ	3.4	2.3
Chrysene	1.0	1.0	1.2	1.0	0.7	1.5	2.1	4.5	1.5	5.8	0.8	4.5	4.2	2.5	1.0	0.4	1.4	2.0	1.8	1.1	1.6	1.2	0.9	0.3	0.4	2.4	1.5
Σ_6PAHs[2)]	2.0	1.5	1.2	1.2	0.8	2.5	1.2	2.4	0.9	6.9	1.2	2.4	4.0	2.9	1.8	2.2	3.1	3.0	17.5	1.1	1.6	2.4	1.1	NQ	0.7	3.0	2.7
α-HCH	0.5	0.6	0.7	0.6	0.6	0.5	0.5	0.8	0.6	0.6	0.5	0.6	0.5	0.6	0.5	0.5	0.4	0.6	0.6	0.6	0.5	0.5	0.6	0.5	0.4	0.8	0.8
β-HCH	0.3	0.5	0.6	0.6	0.6	0.4	0.4	0.8	0.5	0.4	0.3	0.7	0.2	0.4	0.3	NQ	NQ	0.3	0.4	0.3	NQ	NQ	NQ	NQ	NQ	0.3	NQ
γ-HCH	0.6	1.4	0.7	0.7	0.7	0.7	0.6	0.9	0.6	0.8	0.5	1.1	0.6	4.4	0.5	0.3	0.3	0.6	0.5	0.4	0.3	0.3	0.2	0.2	0.3	0.3	0.3
Σ_2HCHs[3)]	0.6	1.0	0.7	0.6	0.6	0.6	0.6	0.8	0.6	0.7	0.5	0.8	0.6	2.4	0.5	0.4	0.4	0.6	0.6	0.5	0.4	0.4	0.4	0.4	0.4	0.5	0.6
HCB	0.7	0.8	0.7	0.7	0.8	0.7	0.8	5.0	0.8	0.8	0.7	0.7	0.7	0.9	0.7	0.7	0.7	0.9	0.9	0.8	0.9	0.8	1.1	0.9	0.8	1.0	0.9
p,p'-DDE	0.4	0.8	0.8	0.6	0.4	NQ	0.5	0.7	0.6	0.4	0.3	0.6	NQ	1.0	NQ	NQ	NQ	0.3	NQ	NQ	NQ	NQ	NQ	NQ	NQ	NQ	NQ
p,p'-DDD	NQ	NQ	1.2	NQ	NQ	NQ	NQ	1.2	NQ	NQ	NQ	NQ	NQ	4.4	NQ	NQ	NQ	NQ	NQ	NQ	NQ	NQ	NQ	NQ	NQ	NQ	NQ
o,p'-DDT	0.5	0.7	0.9	0.8	0.6	0.4	0.4	1.1	0.6	0.6	0.5	0.8	0.3	4.6	0.4	0.2	0.3	0.4	0.3	0.3	NQ	NQ	0.2	0.2	NQ	0.2	0.3

	Coastal sites																										
Compounds	**Oslo**	**Holmestrand**	**Tønsberg**	**Nøtterøy**	**Kragerø**	**Arendal**	**Kristiansand I**	**Kristiansand II**	**Farsund**	**Fedafjorden**	**Flekkefjord**	**Stavanger**	**Sauda**	**Bergen I**	**Bergen II**	**Sunndalsøra**	**Trondheim I**	**Trondheim II**	**Hommelvik**	**Brønnøysund**	**Mo i Rana**	**Narvik I**	**Narvik II**	**Ramsundet**	**Harstad**	**Tromsø I**	**Tromsø II**
p,p'-DDT	0.6	0.8	0.9	0.9	0.6	0.4	0.4	1.1	0.6	0.5	0.6	0.9	0.2	9.3	0.4	0.2	0.3	0.4	0.2	0.2	NQ	NQ	NQ	0.1	NQ	0.2	0.2
Σ_2DDTs[4)]	0.6	0.8	0.9	0.9	0.6	0.4	0.4	1.1	0.6	0.5	0.5	0.8	0.3	7.1	0.4	0.2	0.3	0.4	0.3	0.2	NQ	NQ	NQ	0.1	NQ	0.2	NQ
trans-Chlordane	NQ	2.0	2.7	6.5	5.7	2.1	2.2	3.1	0.8	0.7	1.1	1.3	0.5	1.8	0.7	NQ	0.5	0.9	0.7	0.6	0.6	0.4	0.4	0.3	0.2	0.8	NQ
cis-Chlordane	NQ	1.1	1.5	2.1	2.5	0.9	1.1	1.3	0.7	0.8	0.7	0.9	0.5	1.0	0.6	NQ	0.5	0.8	0.8	0.9	0.6	0.4	0.5	0.6	0.3	0.6	0.3
trans-Nonachlor	NQ	0.9	1.1	2.1	1.6	0.7	1.0	1.2	0.7	0.7	0.7	1.1	0.5	0.7	0.5	NQ	0.4	0.7	0.6	0.7	0.5	0.3	0.4	0.4	0.2	1.0	0.5
cis-Nonachlor	NQ	1.1	1.5	3.4	2.0	0.8	1.9	1.5	0.9	0.8	3.0	2.1	0.6	1.1	0.7	NQ	0.5	0.9	0.9	0.9	0.8	0.4	0.5	0.6	0.2	1.7	NQ
Σ_4Chlordanes	NQ	1.1	1.5	2.8	2.6	1.0	1.3	1.5	0.7	0.7	0.9	1.1	NQ	1.0	NQ	NQ	0.5	0.8	0.7	0.8	0.6	0.4	0.4	0.5	0.3	0.8	NQ

N.Q (not quantified): coastal site concentration < MDL (this study)

N.D (not detected): background concentration < MDL [1]

[1)] Sum of seven PCBs

[2)] Sum of six PAHs (fluorene, phenanthrene, anthracene, fluoranthene, pyrene, chrysene)

[3)] Sum of two HCHs (α and γ-HCH)

[4)] Sum of two DDTs (*o,p`* and *p,p`*-DDT)

Table S9c) Concentrations in coastal zones divided by the minimum European background concentrations (R_{EUmin}).

	Coastal sites																									
Compounds	**Oslo**	**Holmestrand**	**Tønsberg**	**Nøtterøy**	**Kragerø**	**Arendal**	**Kristiansand I**	**Kristiansand II**	**Farsund**	**Fedafjorden**	**Flekkefjord**	**Stavanger**	**Sauda**	**Bergen I**	**Bergen II**	**Sunndalsøra**	**Trondheim I**	**Trondheim II**	**Hommelvik**	**Brønnøysund**	**Mo i Rana**	**Narvik I**	**Narvik II**	**Ramsundet**	**Harstad**	**Tromsø I**	**Tromsø II**
PCB-28	3.9	2.0	1.6	1.6	3.2	1.3	1.1	3.4	0.8	4.1	0.8	2.7	1.1	3.7	1.4	0.5	1.1	3.1	1.0	0.9	2.0	1.8	0.6	0.4	0.7	3.5	1.2
PCB-52	6.1	2.3	1.8	2.2	2.8	1.1	1.5	5.4	0.9	2.1	0.8	4.5	1.9	7.8	2.5	0.5	2.6	2.6	1.0	0.9	1.2	1.7	0.6	0.4	0.8	3.6	1.3
PCB-101	7.9	2.8	2.3	2.9	2.6	1.2	1.7	9.2	1.1	1.9	1.0	6.1	3.4	11.5	1.9	0.5	3.9	3.3	1.4	1.4	1.3	2.0	0.8	0.7	0.9	7.4	1.6
PCB-118	5.6	2.7	1.8	3.2	2.1	1.0	1.5	11.1	0.9	1.4	0.7	5.3	3.9	10.1	1.7	NQ	2.8	2.8	1.2	1.1	1.2	1.7	0.7	NQ	0.7	3.5	1.1
PCB-138	3.9	2.3	1.9	2.7	2.5	1.2	1.4	6.6	1.1	1.3	0.8	4.3	2.2	7.9	1.1	NQ	2.3	2.6	1.8	1.5	1.2	1.3	NQ	0.8	0.9	4.9	0.9
PCB-153	3.7	2.0	1.8	2.1	2.3	1.3	1.3	5.2	1.1	1.2	0.8	3.9	1.6	6.8	1.0	NQ	2.0	2.3	1.6	1.5	1.0	1.1	NQ	NQ	0.8	4.7	0.8
PCB-180	2.0	1.5	1.7	1.4	2.3	1.1	1.1	3.5	0.8	1.1	0.6	2.7	0.8	4.2	0.9	NQ	1.2	1.8	1.4	1.4	0.9	0.6	NQ	0.5	0.7	3.5	0.6
Σ_7PCBs[1)]	5.2	2.3	1.8	2.2	2.7	1.2	1.4	5.9	0.9	2.3	0.8	4.2	2.0	7.3	1.7	NQ	2.3	2.8	1.2	1.2	1.4	1.6	NQ	NQ	0.8	4.4	1.2
Fluorene	3.6	3.4	2.6	2.9	1.9	8.6	2.5	5.3	1.9	9.0	3.5	3.7	8.3	5.7	4.1	6.2	6.6	6.0	51.4	2.0	2.5	6.2	2.5	0.7	2.2	7.3	6.4
Phenanthrene	5.0	3.0	2.4	2.4	1.5	3.6	2.4	4.2	1.7	12.8	2.3	4.7	6.1	5.9	3.8	4.6	6.4	6.1	32.9	2.3	3.3	4.5	2.3	0.5	1.2	5.7	5.1
Anthracene	4.0	4.0	4.3	2.9	2.8	27.1	3.8	12.9	1.7	45.4	2.1	6.4	17.4	12.1	3.3	4.5	15.7	12.3	90.8	5.5	8.5	16.5	6.6	NQ	4.0	17.3	24.1
Fluoranthene	2.1	2.8	2.4	1.8	1.6	3.5	2.7	5.5	2.2	23.8	1.9	7.2	13.3	5.6	3.1	2.3	6.4	5.9	23.2	2.5	3.8	3.9	2.1	0.4	1.0	4.8	3.8
Pyrene	2.1	3.8	3.1	2.2	1.8	4.5	3.3	7.8	2.4	31.0	1.9	9.3	17.8	8.1	3.0	1.7	6.5	7.3	20.8	3.2	4.6	5.9	2.9	0.6	1.6	9.2	7.2
Benzo[a]pyrene	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D	N.D
Benz[a]anthracene	NQ	2.0	2.4	1.7	NQ	5.6	3.6	8.8	1.8	22.0	2.1	5.8	8.0	5.5	1.7	NQ	3.0	4.6	5.4	3.7	4.9	3.9	2.7	NQ	NQ	7.1	4.7
Chrysene	2.1	2.1	2.5	2.0	1.5	3.1	4.3	9.4	3.2	12.1	1.6	9.3	8.8	5.1	2.1	0.8	2.9	4.2	3.7	2.4	3.2	2.4	1.8	0.7	0.9	5.0	3.0
Σ_6PAHs[2)]	4.1	3.1	2.5	2.5	1.6	5.2	2.5	5.0	1.9	14.3	2.6	5.0	8.3	6.0	3.7	4.6	6.5	6.1	36.3	2.3	3.2	5.1	2.4	NQ	1.5	6.3	5.5
α-CH	1.1	1.3	1.4	1.1	1.2	1.0	1.1	1.6	1.3	1.3	1.1	1.3	1.0	1.3	1.0	1.0	0.9	1.3	1.2	1.3	1.0	1.0	1.1	1.1	0.8	1.6	1.6
β-HCH	0.7	1.1	1.2	1.2	1.3	0.9	0.9	1.7	1.1	0.9	0.7	1.4	0.5	0.9	0.5	NQ	NQ	0.7	0.8	0.6	NQ	NQ	NQ	NQ	NQ	0.5	NQ
γ-HCH	1.2	2.9	1.4	1.4	1.5	1.4	1.2	1.9	1.2	1.6	1.0	2.2	1.3	9.1	1.1	0.5	0.7	1.1	1.0	0.7	0.5	0.6	0.5	0.4	0.6	0.5	0.7
Σ_2HCHs[3)]	1.2	2.1	1.4	1.3	1.3	1.2	1.2	1.7	1.2	1.4	1.0	1.8	1.2	5.1	1.0	0.8	0.8	1.2	1.1	1.0	0.8	0.8	0.8	0.7	0.7	1.1	1.2
HCB	1.5	1.7	1.4	1.5	1.7	1.4	1.8	10.4	1.6	1.6	1.5	1.4	1.4	1.9	1.4	1.5	1.5	1.9	1.8	1.6	1.8	1.7	2.4	1.8	1.6	2.0	1.9
p,p'-DDE	0.8	1.7	1.6	1.2	0.9	NQ	1.0	1.5	1.2	0.8	0.7	1.2	NQ	2.0	NQ	NQ	NQ	0.7	NQ	NQ	NQ	NQ	NQ	NQ	NQ	NQ	NQ
p,p'-DDD	NQ	NQ	2.4	NQ	NQ	NQ	NQ	2.5	NQ	NQ	NQ	NQ	NQ	9.1	NQ	NQ	NQ	NQ	NQ	NQ	NQ	NQ	NQ	NQ	NQ	NQ	NQ
o,p'-DDT	1.1	1.5	1.9	1.7	1.3	0.8	0.9	2.2	1.3	1.2	1.1	1.6	0.6	9.5	0.8	0.5	0.5	0.9	0.7	0.6	NQ	NQ	0.4	0.4	NQ	0.4	0.6

	Coastal sites																									
Compounds	**Oslo**	**Holmestrand**	**Tønsberg**	**Nøtterøy**	**Kragerø**	**Arendal**	**Kristiansand I**	**Kristiansand II**	**Farsund**	**Fedafjorden**	**Flekkefjord**	**Stavanger**	**Sauda**	**Bergen I**	**Bergen II**	**Sumndalsøra**	**Trondheim I**	**Trondheim II**	**Hommelvik**	**Brønnøysund**	**Mo i Rana**	**Narvik I**	**Narvik II**	**Ramsundet**	**Harstad**	**Tromsø I**	**Tromsø II**
p,p'-DDT	1.2	1.6	1.9	1.9	1.3	0.8	0.9	2.4	1.3	1.1	1.2	1.8	0.5	19.4	0.8	0.3	0.5	0.7	0.5	0.4	NQ	NQ	NQ	0.2	NQ	0.4	0.5
Σ_2DDTs[4)]	1.2	1.6	1.9	1.8	1.3	0.8	0.9	2.3	1.3	1.1	1.1	1.7	0.6	14.7	0.8	0.4	0.5	0.8	0.6	0.5	NQ	NQ	NQ	0.3	NQ	0.4	NQ
trans-Chlordane	NQ	4.1	5.6	13.6	11.9	4.4	4.5	6.3	1.6	1.5	2.4	2.8	1.0	3.8	1.5	NQ	1.0	1.9	1.4	1.3	1.3	0.9	0.8	0.7	0.5	1.7	NQ
cis-Chlordane	NQ	2.2	3.1	4.4	5.1	1.9	2.3	2.7	1.5	1.6	1.5	2.0	1.0	2.1	1.2	NQ	1.1	1.6	1.6	2.0	1.3	0.8	1.0	1.3	0.7	1.2	0.7
trans-Nonachlor	NQ	1.8	2.3	4.4	3.3	1.5	2.1	2.5	1.5	1.4	1.5	2.2	1.0	1.5	1.1	NQ	0.8	1.4	1.3	1.4	1.0	0.6	0.8	0.9	0.4	2.1	1.1
cis-Nonachlor	NQ	2.3	3.2	7.1	4.2	1.7	3.9	3.2	1.8	1.7	6.3	4.4	1.2	2.2	1.5	NQ	1.0	1.9	1.8	1.9	1.6	0.8	1.1	1.3	0.5	3.4	NQ
Σ_4Chlordanes	NQ	2.3	3.2	5.9	5.3	2.1	2.6	3.2	1.5	1.5	1.9	2.3	NQ	2.1	NQ	NQ	1.0	1.6	1.5	1.6	1.2	0.8	0.9	1.0	0.5	1.7	NQ

N.Q (not quantified): coastal site concentration < MDL (this study)

N.D (not detected): background concentration < MDL [1]

[1)] Sum of seven PCBs

[2)] Sum of six PAHs (fluorene, phenanthrene, anthracene, fluoranthene, pyrene, chrysene)

[3)] Sum of two HCHs (α and γ-HCH)

[4)] Sum of two DDTs (*o,p`* and *p,p`*-DDT)

Table S10a) Number of coastal sites with a ratio ≥ 2, ≥ 1 and > MDL for the median background scenarios.

	Norwegian background (R_{NW})			Nordic background (R_{ND})			European background (R_{EU})		
Components/-groups	**≥ 1**	**≥ 2**	**> MDL**	**≥ 1**	**≥ 2**	**> MDL**	**≥ 1**	**≥ 2**	**> MDL**
PCB-28	24	15	27	22	13	27	13	7	27
PCB-52	25	17	27	24	15	27	15	5	27
PCB-101	26	21	27	22	12	27	17	8	27
PCB-118	25	20	25	22	14	25	14	7	25
PCB-138	25	23	25	19	10	25	13	5	25
PCB-153	24	24	24	19	7	24	13	5	24
PCB-180	25	23	25	18	8	25	8	3	25
Σ_7PCBs	24	21	24	22	13	24	15	5	24
Fluorene	26	22	27	26	23	27	26	17	27
Phenanthrene	26	23	27	26	20	27	24	16	27
Anthracene	26	26	26	26	25	26	26	22	26
Fluoranthene	26	25	27	26	22	27	25	14	27
Pyrene	27	26	27	26	25	27	26	16	27
Benzo[a]pyrene	3	3	3	**0**	**0**	**0**	**0**	**0**	**0**
Benz[a]anthracene	**0**	**0**	**0**	**0**	**0**	**0**	22	14	22
Chrysene	27	24	27	27	24	27	23	11	27
Σ_6PAHs[1)]	26	23	26	26	23	26	25	17	26
α-HCH	27	15	27	27	7	27	3	**0**	27
β-HCH	**0**	**0**	**0**	**0**	**0**	**0**	1	**0**	19
γ-HCH	27	20	27	26	17	27	5	1	27
Σ_2HCHs[2)]	27	20	27	27	17	27	4	1	27
HCB	27	1	27	27	1	27	17	1	27
p,p'-DDE	**0**	**0**	**0**	**0**	**0**	**0**	3	**0**	13
p,p'-DDD	**0**	**0**	**0**	**0**	**0**	**0**	3	1	3
o,p'-DDT	**0**	**0**	**0**	24	16	24	5	1	24
p,p'-DDT	**0**	**0**	**0**	22	19	23	6	1	23
Σ_2DDTs[3)]	**0**	**0**	**0**	22	18	22	6	1	22

	Norwegian background (R_{NW})			Nordic background (R_{ND})			European background (R_{EU})		
Components/-groups	**≥ 1**	**≥ 2**	**> MDL**	**≥ 1**	**≥ 2**	**> MDL**	**≥ 1**	**≥ 2**	**> MDL**
trans-Chlordane	18	9	24	18	10	24	13	8	24
cis-Chlordane	21	9	25	21	7	25	14	3	25
trans-Nonachlor	18	7	25	18	7	25	9	2	25
cis-Nonachlor	21	10	24	22	10	24	17	8	24
Σ_4Chlordanes	18	9	22	18	9	22	13	4	22

[1)] Fluorene, phenanthrene, anthracene, fluoranthene, pyrene, chrysene.

[2)] α-HCH and γ-HCH

[3)] *o,p´*-DDT and *p,p´*-DDT

Bold: Value of zero, when coastal site concentration < European MDL.

Table S10b) Number of coastal sites with a ratio ≥ 2, ≥ 1 and > MDL for the maximum background scenarios.

	Norwegian background (R_{NWmax})			Nordic background (R_{NDmax})			European background (R_{EUmax})		
Components/-groups	**≥ 1**	**≥ 2**	**> MDL**	**≥ 1**	**≥ 2**	**> MDL**	**≥ 1**	**≥ 2**	**> MDL**
PCB-28	18	8	27	8	**0**	27	8	**0**	27
PCB-52	18	9	27	5	2	27	12	4	27
PCB-101	17	8	27	4	**0**	27	12	5	27
PCB-118	17	10	25	2	**0**	25	11	4	25
PCB-138	11	5	25	**0**	**0**	25	11	4	25
PCB-153	11	5	24	**0**	**0**	24	8	3	24
PCB-180	5	1	25	**0**	**0**	25	5	1	25
Σ_7PCBs	15	6	24	3	**0**	24	11	5	24
Fluorene	1	1	27	1	1	27	23	12	27
Phenanthrene	7	2	27	7	2	27	23	13	27
Anthracene	13	8	26	13	8	26	24	17	26
Fluoranthene	13	4	27	8	3	27	21	9	27
Pyrene	22	13	27	11	3	27	22	13	27
Benzo[a]pyrene	3	**0**	3	**0**	**0**	3	**0**	**0**	**0**
Benz[a]anthracene	**0**	**0**	**0**	1	1	22	18	11	22
Chrysene	26	23	27	4	1	27	20	8	27
Σ_6PAHs[1)]	6	2	26	3	2	26	23	13	26
α-HCH	26	**0**	27	7	**0**	27	**0**	**0**	27
β-HCH	18	7	19	**0**	**0**	19	**0**	**0**	19
γ-HCH	21	10	27	12	2	27	3	1	27
Σ_2HCHs[2)]	24	4	27	7	1	27	1	1	27
HCB	2	1	27	1	1	27	2	1	27
p,p'-DDE	**0**	**0**	**0**	**0**	**0**	13	**0**	**0**	13
p,p'-DDD	**0**	**0**	**0**	1	1	3	3	1	3
o,p'-DDT	15	6	24	1	1	24	2	1	24
p,p'-DDT	13	6	23	1	1	23	2	1	23
Σ_2DDTs[3)]	15	6	22	1	1	22	2	1	22

	Norwegian background (R_{NWmax})			Nordic background (R_{NDmax})			European background (R_{EUmax})		
Components/-groups	**≥ 1**	**≥ 2**	**> MDL**	**≥ 1**	**≥ 2**	**> MDL**	**≥ 1**	**≥ 2**	**> MDL**
trans-Chlordane	8	3	24	8	3	24	10	6	24
cis-Chlordane	9	2	25	5	1	25	7	2	25
trans-Nonachlor	2	**0**	25	2	**0**	25	5	1	25
cis-Nonachlor	6	1	24	3	**0**	24	10	4	24
Σ_4Chlordanes	5	2	22	5	2	22	9	2	22

[1)] Fluorene, phenanthrene, anthracene, fluoranthene, pyrene, chrysene.

[2)] α-HCH and γ-HCH

[3)] *o,p´*-DDT and *p,p´*-DDT

Bold: Value of zero, when coastal site concentration < European MDL.

Table S10c) Number of coastal sites with a ratio ≥ 2, ≥ 1 and > MDL for the minimum background scenarios.

	Norwegian background (R_{NWmin})			Nordic background (R_{NDmin})			European background (R_{EUmin})		
Components/-groups	**≥ 1**	**≥ 2**	**> MDL**	**≥ 1**	**≥ 2**	**> MDL**	**≥ 1**	**≥ 2**	**> MDL**
PCB-28	27	26	27	27	26	27	20	9	27
PCB-52	27	25	27	27	25	27	19	12	27
PCB-101	27	27	27	27	27	27	23	12	27
PCB-118	**0**	**0**	**0**	**0**	**0**	**0**	20	11	25
PCB-138	25	25	25	25	25	25	21	11	25
PCB-153	**0**	**0**	**0**	**0**	**0**	**0**	20	10	24
PCB-180	25	25	25	25	25	25	16	6	25
Σ_7PCBs	**0**	**0**	**0**	**0**	**0**	**0**	21	12	24
Fluorene	27	27	27	27	27	27	26	24	27
Phenanthrene	27	26	27	27	26	27	26	23	27
Anthracene	**0**	**0**	**0**	**0**	**0**	**0**	26	25	26
Fluoranthene	27	26	27	27	26	27	26	22	27
Pyrene	27	27	27	27	27	27	26	22	27
Benzo[a]pyrene	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Benz[a]anthracene	**0**	**0**	**0**	**0**	**0**	**0**	22	19	22
Chrysene	27	27	27	27	27	27	24	21	27
Σ_6PAHs[1)]	**0**	**0**	**0**	**0**	**0**	**0**	26	23	26
α-HCH	27	27	27	27	27	27	21	**0**	27
β-HCH	**0**	**0**	**0**	**0**	**0**	**0**	7	**0**	19
γ-HCH	27	27	27	27	27	27	17	3	27
Σ_2HCHs[2)]	27	27	27	27	27	27	20	2	27
HCB	27	10	27	27	11	27	27	3	27
p,p'-DDE	**0**	**0**	**0**	**0**	**0**	**0**	8	**0**	13
p,p'-DDD	**0**	**0**	**0**	**0**	**0**	**0**	3	3	3
o,p'-DDT	**0**	**0**	**0**	**0**	**0**	**0**	11	2	24
p,p'-DDT	**0**	**0**	**0**	**0**	**0**	**0**	11	2	23
Σ_2DDTs[3)]	**0**	**0**	**0**	**0**	**0**	**0**	11	2	22

	Norwegian background (R_{NWmin})			Nordic background (R_{NDmin})			European background (R_{EUmin})		
Components/-groups	**≥ 1**	**≥ 2**	**> MDL**	**≥ 1**	**≥ 2**	**> MDL**	**≥ 1**	**≥ 2**	**> MDL**
trans-Chlordane	24	20	24	**0**	**0**	**0**	19	10	24
cis-Chlordane	25	20	25	25	23	25	21	7	25
trans-Nonachlor	24	18	25	25	23	25	19	7	25
cis-Nonachlor	24	22	24	**0**	**0**	**0**	21	10	24
Σ_4Chlordanes	22	17	22	**0**	**0**	**0**	18	9	22

[1)] Fluorene, phenanthrene, anthracene, fluoranthene, pyrene, chrysene.

[2)] α-HCH and γ-HCH

[3)] *o,p´*-DDT and *p,p´*-DDT

Bold: Value of zero, when coastal site concentration < European MDL.

Table S11 Estimated log K_{OA}, t_{25} and t_{95} at 3 different air temperatures.

	log K_{OA}			t_{25} (days)			t_{95} (days)		
	8°C	14°C	17°C	8°C	14°C	17°C	8°C	14°C	17°C
HCB	8.01	7.71	7.57	30	20	16	312	204	166
PCB-28	8.68	8.37	8.23	81	52	42	838	536	432
PCB-52	9.08	8.76	8.61	146	92	73	1506	948	757
PCB-101	9.62	9.29	9.13	319	199	158	3302	2054	1631
PCB-118	10.30	9.96	9.79	877	528	413	9069	5466	4277
PCB-138	10.57	10.24	10.07	1296	793	625	13409	8206	6469
PCB-153	10.44	10.07	9.89	1062	623	481	10991	6442	4973
PCB-180	11.15	10.79	10.61	3016	1779	1377	31200	18401	14248
α-HCH	8.12	7.88	7.76	36	25	21	369	259	219
γ-HCH	8.35	8.13	8.02	50	36	31	520	374	319
p,p-DDT	10.58	10.27	10.12	1308	830	666	13531	8583	6885
p,p-DDE	10.55	10.24	10.09	1252	794	637	12949	8214	6589
p,p-DDD	10.88	10.57	10.42	2030	1288	1033	21005	13324	10687
trans-Chlordane	9.85	9.48	9.30	451	261	200	4667	2697	2067
cis-Chlordane	9.87	9.49	9.30	464	265	202	4796	2743	2093
Fluorene	7.59	7.29	7.14	16	11	8	170	109	88
Phenanthrene	8.36	8.07	7.94	51	33	27	526	345	282
Anthracene	8.43	8.16	8.03	56	38	31	578	391	324
Fluoranthene	9.49	9.18	9.02	267	168	134	2760	1735	1385
Pyrene	9.46	9.18	9.04	253	168	138	2615	1741	1429
Benzo(a)pyrene	11.81	11.56	11.45	7920	5556	4680	81928	57480	48411
Benz(a)anthracene	10.80	10.46	10.29	1821	1093	854	18841	11310	8832
Chrysene	11.52	11.04	10.81	5219	2583	1837	53987	26722	19007

Values in red are less than the longest deployment period in this study (Table S1).

Text

S 1.1 Internal standard recoveries

The percentage recovery for the internal standard recoveries for the exposed samples, field and method blanks were all together at the same level (Table S2), and address minimal matrix interferences. Nonetheless, the recovery was all over somewhat higher for the exposed samples than for some of the internal standards, in comparison to field and method blanks. Furthermore, a problem during the analysis for one of the exposed samples resulted in a high percentage recovery for the ^{13}C-*p,p'*-DDT isomer.

S 1.2 PRC recoveries

The second recovery values were for the added mixture of PRCs. The range in the percentage recovery was governed for each PRC (8) in the field and method blanks, and ranged from 67-117 % (Table S2). The lower value originated from PCB-30, which had to be corrected towards two internal standards (^{13}C HCB and ^{13}C PCB-28).

S 1.3 Approach towards equilibrium

During deployment, the duration of the linear phase will vary and the more volatile compounds (low K_{OA}) will reach equilibrium faster than the less volatile compounds (high K_{OA}). The uptake profiles for substances with different log K_{OA} values are usually plotted with the equivalent sample volume calculated and expressed as a function of the disk deployment time (see e.g. [2]). For chemicals with log K_{OA} values larger than 8.5 to 9, the sampling rate has previously been found to remain linear over the first 100 days [2]. Upon prolonged exposures, the sampling rate will proceed towards the curvilinear stage and ultimately approach equilibrium[3]. For substances of lower K_{OA}, the PUF disk may thus become saturated in less than 100 days. In this study, the coastal samples were deployed for 91 to 93 days with average air temperatures at the different sites ranging from 8 ºC to 17 ºC with a mean value of 14 ºC (Table S1). As K_{OA} is strongly temperature dependent, we have calculated log K_{OA} at three different relevant air temperatures (8 ºC, 14 ºC and 17 ºC) for selected substances (Table S11). The temperature-dependent K_{OA} values were calculated using reported data on physical-chemical properties and their temperature dependencies from literature reviews [4-7] with the notable exception of the temperature

dependencies for the DDTs, for which an energy of phase transfer of -80 kJ mol^{-1} was assumed for each isomer. Using equations presented by Shoeib and Harner [3], PUF characteristics applicable for this study [1], and applying the default uptake rate throughout (3.5 m^3/day), we have furthermore estimated the times to 95% of equilibrium (t_{95}) as well as the upper bounds of the linear uptake phase (t_{25} – arbitrary defined as the time when the PUF has accumulated 25% of the equilibrium value). The results in Table S11 implies that substances with the lower log K_{OA} values are increasingly about to approach equilibrium by the end of exposure – in particular at the southernmost and warmer coastal sites - which also can be deduced from the equivalent air volumes in Tables S3b-S6b.

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