

Supplementary Materials: Distribution of Polybrominated Diphenyl Ethers in Sewage Sludge, Sediments and Fish from Latvia

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Supplementary materials with listed measured concentrations of polybrominated diphenyl ether (PBDE) congeners, content of dry matter in sewage sludge, content of dry material and total organic carbon in sediments and content of lipids in biota samples, minimal and maximal values of detection limit (LOD) and limit of quantification (LOQ) for PBDEs measurements in water samples.

Table S1. Concentrations of PBDEs (ng·kg⁻¹) and content of dry matter (DM) in sewage sludge. WWTP: waste water treatment plant.

WWTP	BDE 28	BDE 47	BDE 99	BDE 100	BDE 153	BDE 154	BDE 183	BDE 209	DM (%)
Valmiera WWTP	0.10	5.10	6.20	1.20	1.00	0.70	0.36	700.00	9.86
Saldus WWTP	0.26	5.20	6.60	0.76	1.00	1.10	0.45	120.00	12.4
Dobele WWTP	0.17	3.70	4.00	0.73	0.87	0.59	0.53	510.00	15.1
Rezekne WWTP	0.14	5.40	4.30	0.90	1.20	0.99	0.56	110.00	12.6
Ventspils WWTP	0.095	6.60	7.10	1.20	1.20	0.82	0.38	250.00	18.5
Daugavpils WWTP	0.05	6.10	6.50	1.60	0.51	0.65	0.51	410.00	17.0
Riga WWTP	NA	3.00	5.40	1.10	0.37	0.45	0.12	190.00	22.3
Liepaja WWTP	NA	1.70	1.80	0.33	0.18	0.17	0.08	74.00	22.5

Table S2. Concentrations of PBDEs (ng·g⁻¹), content of dry material (DW) and total organic (TOC) carbon in sediments.

Lake/River	BDE 28	BDE 47	BDE 99	BDE 100	BDE 153	BDE 154	BDE 183	DW (%)	TOC (%)
Salaca	0.0005	0.0051	0.0039	0.0010	0.0016	0.0013	0	61.1	1.88
Mazsalaca	0.0003	0.0045	0.0048	0.0011	0.0013	0.0012	0	80.0	0.17
Pedele	0.0001	0.0036	0.0043	0.0007	0.0010	0.0007	0	81.3	0.16
Gauja	0.0005	0.0051	0.0057	0.0014	0.0016	0.0017	0	68.0	0.47
Abuls	0.0004	0.0072	0.0059	0.0014	0.0009	0.0007	0	58.9	1.92
Dunezers	0.0022	0.0210	0.0200	0.0064	0.0042	0.0048	0.0072	17.6	18.88
Limbazu	0.0021	0.0122	0.0121	0.0038	0.0036	0.0043	0.0053	47.2	15.40
Burtnieks	0.0023	0.0189	0.0179	0.0055	0.0042	0.0052	0.0076	14.0	10.49
Murats	0.0023	0.0175	0.0149	0.0042	0.0042	0.0073	0.0083	15.2	14.70
Juweris	0.0016	0.0105	0.0093	0.0028	0.0034	0.0048	0.0039	16.4	11.23
Lizdoles	0.0044	0.0440	0.0276	0.0083	0.0063	0.0088	0.0060	8.8	15.67
Trikāta	0.0036	0.0516	0.0423	0.0113	0.0080	0.0076	0.0094	8.1	10.47
Alauksts	0.0030	0.0241	0.0141	0.0049	0.0039	0.0086	0.0065	7.0	16.42

Table S3. Concentrations of PBDEs (ng·g⁻¹) and content of lipids in biota samples in tissues of European perch (*Perca fluviatilis*).

Lake/River	BDE 28	BDE 47	BDE 99	BDE 100	BDE 153	BDE 154	BDE 183	BDE 209	Lipids (%)
Salaca	0.0022	0.0849	0.0151	0.0202	0.0039	0.0126	0.0006	0.2130	2.1
Mazsalaca	0.0019	0.0382	0.0110	0.0123	0.0054	0.0106	0.0011	0.2310	2.2
Gauja	0.0026	0.1110	0.0321	0.0178	0.0065	0.0173	0.0016	0.2010	3.5
Dunezers	0.0048	0.2260	0.0537	0.0632	0.0112	0.0334	0.0019	0.2630	2.7
Limbazu	0.0046	0.3090	0.1410	0.0997	0.0252	0.0444	0.0013	0.1990	1.5
Burtnieks	0.0008	0.0203	0.0113	0.0069	0.0033	0.0052	0.0010	0.1440	1.4
Murats	0.0003	0.0081	0.0036	0.0021	0.0013	0.0022	0.0004	0.1120	1.5
Juweris	0.0025	0.1340	0.0756	0.0271	0.0082	0.0178	0.0012	0.2320	1.1
Lizdoles	0.0007	0.0148	0.0107	0.0046	0.0033	0.0046	0.0016	0.1890	2.1
Trikatas	0.0004	0.0117	0.0047	0.0032	0.0016	0.0029	0.0004	0.3600	2.0

Table S4. Minimal and maximal values of detection limit (LOD) and limit of quantification (LOQ) for PBDEs measurements in water samples (ng·L⁻¹).

Congener	LOD_{min}, ng·L⁻¹	LOD_{max}, ng·L⁻¹	LOQ_{min}, ng·L⁻¹	LOQ_{max}, ng·L⁻¹
BDE-28	0.003	0.035	0.02	0.07
BDE-47	0.003	0.170	0.11	0.35
BDE-99	0.052	0.260	0.10	0.53
BDE-100	0.052	0.210	0.11	0.41
BDE-153	0.041	0.420	0.47	0.97
BDE-154	0.016	0.420	0.21	1.00
BDE-183	0.050	0.190	0.21	0.38
BDE-209	1.000	1.400	2.00	2.70



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