

### Supplementary Material on the Methodology Part III

Eel quality classes, reference values and boundary values of the quality classes for a series of heavy metals, PCB congeners and organochlorine pesticides

**Table 1.** Reference values and boundary values of the quality classes for a series of heavy metals, PCB congeners and organochlorine pesticides as defined in Flanders' Eel Pollution Monitoring Network (EPMN)

Quality classes		1	2	3	4
Contaminant	Reference value (RV)	Not deviating $\log C/RV < 0.4$	Slightly deviating $0.4 \leq \log C/RV < 0.8$	Deviating $0.8 \leq \log C/RV < 1.2$	Strongly deviating $\log C/RV \geq 1.2$
Mercury	40	< 100	100 - < 252	252 - < 634	$\geq 634$
Cadmium	2	< 5	5 - < 12.6	12.6 - < 31.7	$\geq 31.7$
Lead	10	< 25	25 - < 63	63 - < 158	$\geq 158$
Copper <sup>2</sup>	0.25	< 0.6	0.6 - < 1.6	1.6 - < 4	$\geq 4$
Zinc <sup>2</sup>	14	< 35	35 - < 88	88 - < 222	$\geq 222$
Nickel	14	< 35	35 - < 88	88 - < 222	$\geq 222$
Chrome	96	< 241	241 - < 606	606 - < 1521	$\geq 1521$
Arsenic	41	< 103	103 - < 259	259 - < 650	$\geq 650$
Selenium	205	< 515	515 - < 1293	1293 - < 3249	$\geq 3249$
PCB 28	0.12	< 0.3	0.3 - < 0.8	0.8 - < 1.9	$\geq 1.9$
PCB 31	0.1	< 0.3	0.3 - < 0.6	0.6 - < 1.6	$\geq 1.6$
PCB 28+31	0.25	< 0.6	0.6 - < 1.6	1.6 - < 4	$\geq 4$
PCB 52	1	< 2.5	2.5 - < 6.3	6.3 - < 15.8	$\geq 15.8$
PCB 101	2.5	< 6	6 - < 16	16 - < 40	$\geq 40$
PCB 105	1.2	< 3	3 - < 7.6	7.6 - < 19	$\geq 19$
PCB 118	3.5	< 9	9 - < 22	22 - < 55	$\geq 55$
PCB 138	7.7	< 19	19 - < 49	49 - < 122	$\geq 122$
PCB 153	10	< 25	25 - < 63	63 - < 158	$\geq 158$
PCB 156	0.6	< 1.5	1.5 - < 3.8	3.8 - < 9.5	$\geq 9.5$
PCB 180	4.5	< 11	11 - < 28	28 - < 71	$\geq 71$
$\sum$ PCBs	29	< 73	73 - < 183	183 - < 460	$\geq 460$
$\sum$ PCBs <sup>1</sup>	240	< 603	603 - < 1514	1514 - < 3804	$\geq 3804$
$\alpha$ -HCH	0.05	< 0.1	0.1 - < 0.3	0.3 - < 0.8	$\geq 0.8$
$\gamma$ -HCH	1.3	< 3.3	3.3 - < 8.2	8.2 - < 20.6	$\geq 20.6$
Dieldrin	1.1	< 2.8	2.8 - < 6.9	6.9 - < 17.4	$\geq 17.4$
HCB	0.5	< 1.3	1.3 - < 3.2	3.2 - < 7.9	$\geq 7.9$
<i>p,p'</i> -DDD	2.5	< 6	6 - < 16	16 - < 40	$\geq 40$
<i>p,p'</i> -DDT	0.005	< 0.01	0.01 - < 0.03	0.03 - < 0.08	$\geq 0.08$
<i>p,p'</i> -DDE	13	< 33	33 - < 82	82 - < 206	$\geq 206$
$\sum$ DDTs	16	< 40	40 - < 101	101 - < 254	$\geq 254$

Notes: Values are expressed in ng/g wet weight of muscle tissue, unless indicated as <sup>1</sup> in ng/g lipid weight or <sup>2</sup> in  $\mu$ g/g wet weight of muscle tissue.

C: concentration;  $\sum$  PCB is indicated for the 7 PCBs indicators (adapted from Belpaire and Goemans, 2007)

## Reference

**Belpaire, C. & Goemans, G.** 2007. Eels: Contaminant cocktails pinpointing environmental contamination. *ICES Journal of Marine Science*, 64(7): 1423–1436.