

Table S1. Retention time (RT), molecular mass (MW), primary (target) ion (T) and secondary (qualifier) ion (Q)

PAHs	RT (min)	MW	T	Q
Nap	4.40	128.06	128	129
Acy	7.10	152.07	152	153
Ace	7.36	154.07	153	152
Fln	8.25	166.07	166	165
Phe	10.02	178.08	178	-
Ant	10.11	178	178	-
Flt	12.13	202.07	202	-
Pyr	12.59	202.07	202	-
BaA	14.65	228.09	228	229
Chr	14.76	228.09	228	229
BbF	16.65	252.31	253	252
BkF	16.69	252.31	253	252
BaP	17.51	252.31	252	253
IcP	21.99	276.33	276	278
DhA	20.72	278.35	278	276
BgP	20.79	276.33	276	278

Table S2. The average values for precision, reproducibility, accuracy, linearity, LOQ and LQD for PAHs method validation

PAHs	Precision (%)	Reproducibility (%)	Accuracy (%)	Linearity (r^2) ^a	LOQ (µg/kg)	LQD (µg/kg)
Nap	11.3	6.33	95.0	0.99853	1.20	0.30
Acy	7.91	7.82	99.0	0.99672	1.30	0.29
Ace	8.52	8.32	99.3	0.99768	1.05	0.32
Fln	2.82	10.2	100	0.99792	1.11	0.30
Ant	3.53	3.73	98.7	0.99603	1.10	0.30
Phe	4.31	11.4	85.9	0.99847	1.18	0.35
Flt	3.61	3.72	95.3	0.99787	1.15	0.30
BaA	9.44	8.6	89.7	0.99825	1.30	0.37
Pyr	4.74	6.91	91.1	0.99792	1.21	0.32
Chr	5.33	8.20	92.5	0.99810	1.13	0.34
BbF	8.52	14.3	86.4	0.99408	1.30	0.36
BkF	3.51	3.32	94.3	0.99796	1.21	0.32
BaP	3.23	3.81	96.8	0.99871	2.00	0.53
DhA	8.72	11.3	91.2	0.99534	1.99	0.51
BgP	9.71	11.3	81.5	0.99781	1.90	0.45
IcP	9.51	10.3	85.3	0.99524	1.91	0.53
min	2.82	3.32	81.5	0.99853	1.05	0.30
max	11.3	14.3	100	0.99672	1.81	0.50

(r^2)^a- Coefficient of determination; Nap-naphthalene; Acy-acenaphthylene; Ace-acenaphthene; Fln-fluorene; Ant-anthracene Phe-phenanthrene; ; Flt-fluoranthene; BaA-benz[a]anthracene; Pyr-pyrene; Chr-chrysene; BbF-benzo[b]fluoranthene; BkF-benzo[k]fluoranthene; BaP-benzo[a]pyrene; DhA-dibenzo[a,h]anthracene; BgP-benzo[ghi] -perylene; IcP-indeno[1,2,3-cd]pyrene; Limit of Quantification (LOQ) and Limit of Detection (LQD)