

Table S-2 Summary of analytical results for the determination of 16 PAHs in ELS-1($\mu\text{g/kg}$)

No. of Labs PAHs	01	02	05	10	07		03	04	06	08	09	11	
	Method 1 SE/ SPE/ GC-MS	Method 2 PLE/SPE/GC- MS	Method 2 PLE/SPE/G C-MS	Method 2 PLE/SPE/G C-MS	Method 3 SE/ GC-MS	SD	Method 4 SE/ SPE/ HPLC	Method 4 SE/ SPE/ HPLC	Method 4 SE/ SPE/ HPLC	Method 5 PLE/SPE/H PLC	Method 6 PLE/GPC/H PLC	Method7 PLE/GPC/UP LC	SD
Naphthalene	83.7(8.9)	53.1(13.9)	51.8(5.6)	58.4(6.5)	45.6(7.1)	14.8	59.9(5.9)	45.3(14.7)	68.5(9.1)	57.1(1.3)	61.4(7.1)	73.7(10.3)	9.8
Acenaphthylene	74.0(3.3)	15.5(7.4)	31.4(7.3)	25.1(3.0)	29.1(5.1)	22.6	-	87.6(13.4)	-	12.3(8.4)	-	16.3(12.7)	42.4
Acenaphthene	192.0(2.3)	104.3(3.4)	136.8(4.1)	136.3(5.9)	154.2(5.5)	32.0	180.3(3.8)	130.7(10.4)	100.3(2.5)	158.4(1.4)	165.7(7.1)	157.0(6.6)	28.7
Fluorene	322.2(3.3)	208.7(2.6)	261.0(4.2)	258.3(6.3)	257.7(5.3)	40.3	293.0(6.2)	277.5(7.9)	249.9(2.0)	305.0(2.4)	300.7(7.0)	261.0(7.0)	22.3
Phenanthrene	2500(3.3)	2122(8.8)	2564(4.6)	2196(3.4)	2810(2.6)	281.3	2518(2.2)	2435(7.5)	2314(3.3)	2778(1.6)	3239(3.5)	2484(6.8)	336.0
Anthracene	332.4(2.9)	260.1(2.8)	265.4(4.9)	287.4(4.2)	341.2(3.1)	37.6	342.6(1.5)	351.5(4.9)	263.2(3.2)	336.8(5.2)	376.5(3.1)	287.3(7.5)	42.5
Fluoranthene	2848(2.8)	2457(1.5)	2851(5.4)	2701(4.5)	2782(3.9)	163.3	2785(3.1)	2795(5.0)	2885(3.2)	2798(1.0)	3272(3.0)	2679(4.9)	208.0
Pyrene	1977(1.7)	1779(5.1)	1850(7.8)	1882(1.4)	1880(5.2)	71.3	1929(2.7)	1832(5.9)	2221(2.0)	1888(0.6)	2268(3.8)	1829(5.2)	197.8
Benz[a]anthracene	865.8(2.0)	725.7(7.5)	817.3(3.1)	824.6(4.3)	789.0(4.1)	51.9	801.4(2.0)	762.8(8.0)	1103*(1.3)	649.6(1.3)	855.2(3.2)	789.4(5.3)	76.1
Chrysene	-	-	-	-	-	-	880.3(3.1)	859.3(3.0)	800.4(2.0)	756.7(2.7)	795.9(1.9)	696.3(3.3)	67.2
Chrysene+Triphenylene	771.7(2.2)	702.1(4.2)	868.1(3.2)	861.7(1.4)	748.2(4.2)	72.5	-	-	-	-	-	-	-
Benzo[b]fluoranthene	745.1(2.5)	750.4(5.8)	741.0(2.7)	801.3(4.8)	603.7(5.2)	73.8	673.3(2.2)	625.8(5.3)	790.9(2.2)	674.3(2.0)	770.6(3.4)	999.0*(3.1)	70.5
Benzo[k]fluoranthene	434.0(3.6)	323.2(2.9)	433.0(6.9)	380.3(4.2)	370.0(4.8)	46.7	379.2(2.2)	351.8(6.9)	441.5(1.3)	364.9(1.7)	424.0(3.5)	381.5(3.0)	34.9
Benzo[a]pyrene	577.7(3.5)	577.0(6.8)	645.7(6.7)	642.5(3.5)	550.7(4.7)	42.8	574.4(2.4)	687.8(5.4)	739.6(3.5)	592.5(1.9)	604.2(3.9)	643.8(6.0)	63.3
Indeno[1,2,3-cd]pyrene	554.5(2.5)	590.7(5.6)	662.5(4.2)	546.8(3.9)	526.8(4.1)	53.5	576.9(5.2)	496.2(3.6)	733.5(3.7)	538.2(2.0)	623.8(3.1)	565.1(4.4)	82.5
Dibenz[a,h]anthracene	134.3(4.1)	93.3(6.7)	120.0(9.8)	122.0(7.3)	45.7(4.7)	35.4	103.4(9.6)	93.8(4.1)	160.8(2.5)	132.5(2.6)	119.8(4.8)	122.3(4.6)	23.5
Benzo[ghi]perylene	537.7(3.2)	553.3(6.1)	545.9(2.0)	564.8(3.6)	538.3(4.0)	11.3	503.1(2.1)	545.3(5.8)	689.3*(1.6)	575.5(6.5)	804.7*(2.5)	585.3(5.4)	37.0

“-” No reported data; “SD” Standard deviation among laboratories; “*” The data of removed outliers; “()” Relative standard deviation of each laboratories (% , $n=6$).