

## Supplementary Information

**Table S1 Polycyclic Aromatic Hydrocarbon (PAH) Recovery Efficiencies**

Recovery efficiencies for each analyte determined using 10 blanks and 10 spikes. One blank, one spike and non-extracted spike and surrogate were included with each batch of samples analysed.

Analyte	% Spike Recovery	Standard deviation (ng/PUF)	% Relative Standard Deviation
Naphthalene	77.85	0.93	6.03
Acenaphthylene	98.76	0.62	3.14
Acenaphthene	95.67	0.55	2.95
Fluorene	96.46	0.75	3.90
Phenanthrene	89.94	0.52	2.89
Anthracene	93.75	0.76	4.03
Fluoranthene	97.30	0.48	2.51
Pyrene	95.35	0.48	2.52
Benz(a)anthracene	89.73	0.57	3.14
Chrysene	104.93	0.60	3.00
Benzo(b+f+j+k)fluoranthene	99.63	1.29	3.45
Benzo(a)pyrene	94.00	1.14	6.35
Perylene	103.09	0.53	2.99
Indeno(1,2,3-cd)pyrene	94.27	1.05	5.39
Dibenz(a,h)anthracene	103.73	0.97	5.14
Benzo(g,h,i)perylene	96.58	0.73	3.73

**Table S2 Polycyclic Aromatic Hydrocarbon (PAH) Calibration Curve Coefficients of Determination**

Analyte	R <sup>2</sup>
Naphthalene	0.9993
Acenaphthylene	0.9994
Acenaphthene	0.9983
Fluorene	0.9994
Phenanthrene	0.9990
Anthracene	0.9987
Fluoranthene	0.9988
Pyrene	0.9987
Benz[a]anthracene	0.9968
Chrysene	0.9990
Benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[f]fluoranthene	0.9994
Benzo[a]pyrene	0.9989
Perylene	0.9980
Indeno[1,2,3-cd]pyrene	0.9974
Dibenz[a,h]anthracene	0.9988
Benzo[g,h,i]perylene	0.9974

**Table S3 Diesel Particulate Matter (DPM) measurements in Fire Stations**

The concentration of elemental carbon EC to show the atmospheric contamination from diesel particulate matter (DPM) due to standard fire station activities. The contribution of EC from the total PM2.5 mass, expressed as total carbon (TC) has also been listed to show the total contribution of atmospheric contamination by DPM.

Station Location	Concentration		Start of Shift		Turn-out Simulation	Return Simulation	Outside	Engine Bay		Duty Office	Dormitory
CS	EC	mg/m <sup>3</sup>	0.002		0.001	0.001	<0.001	<0.001		0.001	<0.001
	EC/TC	Avg, 0.001	0.034		0	0	0.004	0.011		0.021	0.005
TV	EC	mg/m <sup>3</sup>	0.011		0.002	0.007	0.007	0.001		0.001	0.001
	EC/TC	Avg, 0.011	0.055		0.006	0.017	0.48	0.063		0.015	0.049
RH	EC	mg/m <sup>3</sup>	0.06		0.009	0.006	0.001	0.002		0.001	0.002
	EC/TC	Avg, 0.007	0.087		0.027	0.032	0.078	0.069		0.032	0.072
GP	EC	mg/m <sup>3</sup>	0.23				<0.001	0.018	0.026	0.006	<0.001
	EC/TC	Avg, 0.017	0.27				0	0.30	0.24	0.19	0
MD	EC	mg/m <sup>3</sup>	0.06		<0.01	0.01	0.002	0.003		0.001	0.001
	EC/TC	Avg, 0.008	0.17		0.008	0.042	0.098	0.11		0.046	0.019
CB	EC	mg/m <sup>3</sup>	0.06		0.01	0.02	0.002	0.005		0.001	<0.001
	EC/TC	Avg, 0.008	0.13		0.056	0.078	0.018	0.14		0.018	0.024
AA	EC	mg/m <sup>3</sup>	0.73	0.080	0.01	0.02	0.002	0.009		0.005	0.002
	EC/TC	Avg, 0.019	0.53	0.11	0.037	0.049	0.11	0.22		0.12	0.042
LL	EC	mg/m <sup>3</sup>	0.036		0.001	<0.001	<0.001	0.003		<0.001	<0.001
	EC/TC	Avg, 0.004	0.13		0.011	0	0	0.068		0	0