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Supplementary Materials

Multivariate Analysis for Assessing Sources, and Potential Risks of Polycyclic Aromatic Hydrocarbons in Lisbon Urban Soils

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Table S1. Descriptive statistics of the general physical and chemical parameters of Lisbon urban soils.

Parameter	Mean	Median	Min.	Max.
pH ($CaCl_2$)	7.0	7.0	5.5	7.6
TC (%)	4.5	4.1	0.69	24
OC (%)	2.7	2.4	0.57	8.6
OM (%)	7.4	6.4	0.91	40
CEC (cmol(+) kg^{-1})	19	18	2.1	52
Sand (%)	60	60	11	96
Silt (%)	26.6	27	2.9	48
Clay (%)	14	13	1.0	44

Table S2. Descriptive statistics of potentially toxic elements concentrations in Lisbon urban soils.

Parameter	Mean	Median	Min.	Max.
Al (%)	1.23	1.01	0.21	4.27
Fe (%)	2.14	1.77	0.18	7.31
As (mg kg^{-1})	4.74	4.40	<0.1	29.1
Ca (%)	3.97	3.49	0.10	12.7
Co (mg kg^{-1})	11.1	6.50	0.60	48.8
Cr (mg kg^{-1})	41.1	29.1	1.00	201
Cu (mg kg^{-1})	45.7	35.8	3.50	258
Hg (mg kg^{-1})	0.44	0.19	0.01	3.76
Ni (mg kg^{-1})	40.1	21.7	2.00	209
Pb (mg kg^{-1})	89.7	66.4	4.7	428
Zn (mg kg^{-1})	117	100	7.00	540

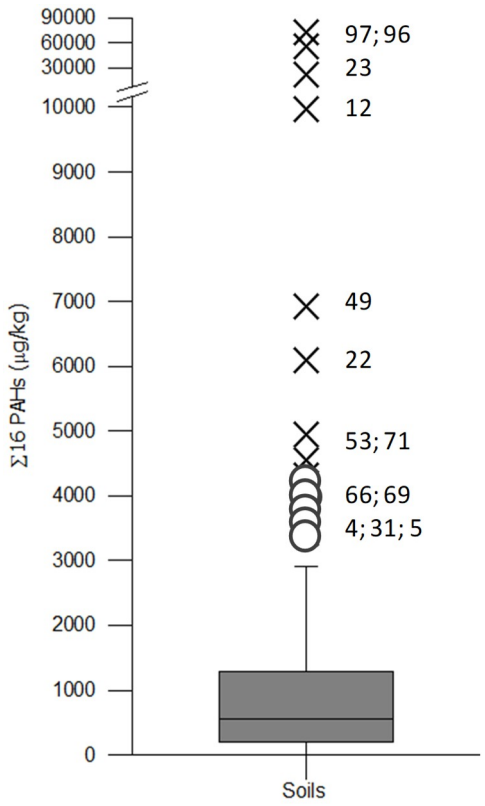

Figure S1. Boxplot showing the variation of the Sum16PAHs in Lisbon soils. Boxes define the interquartile range and the line is the median. Outliers are defined as values between 1.5 and 3 box lengths (o) and extreme values as more than 3 box lengths (x).

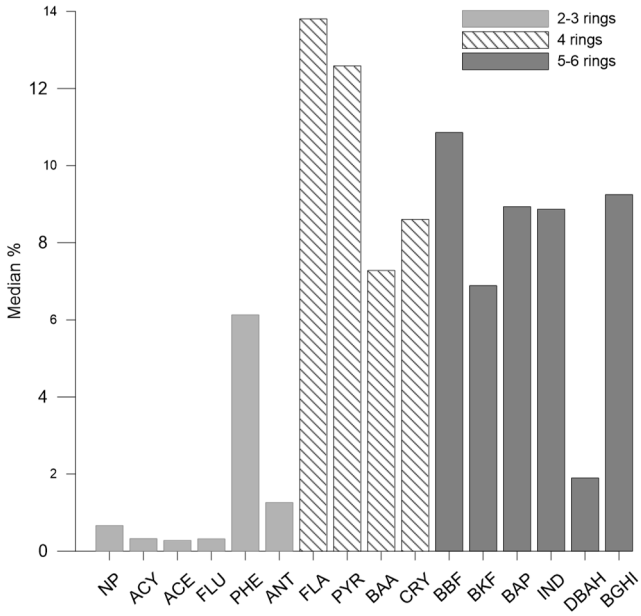

Figure S2. Median percentages of individual compounds in Lisbon urban soils.

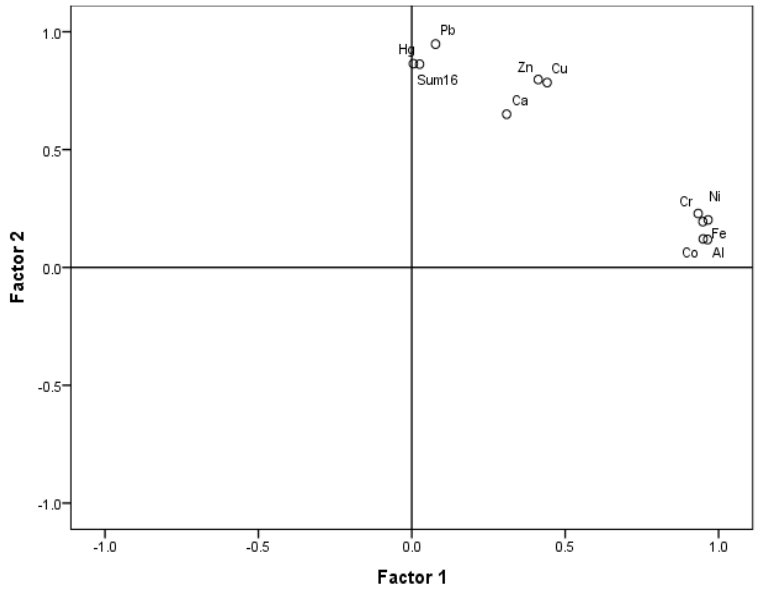

Figure S3. Loading plots of factor 1 and factor 2 of the FA including PAHs and PTEs.

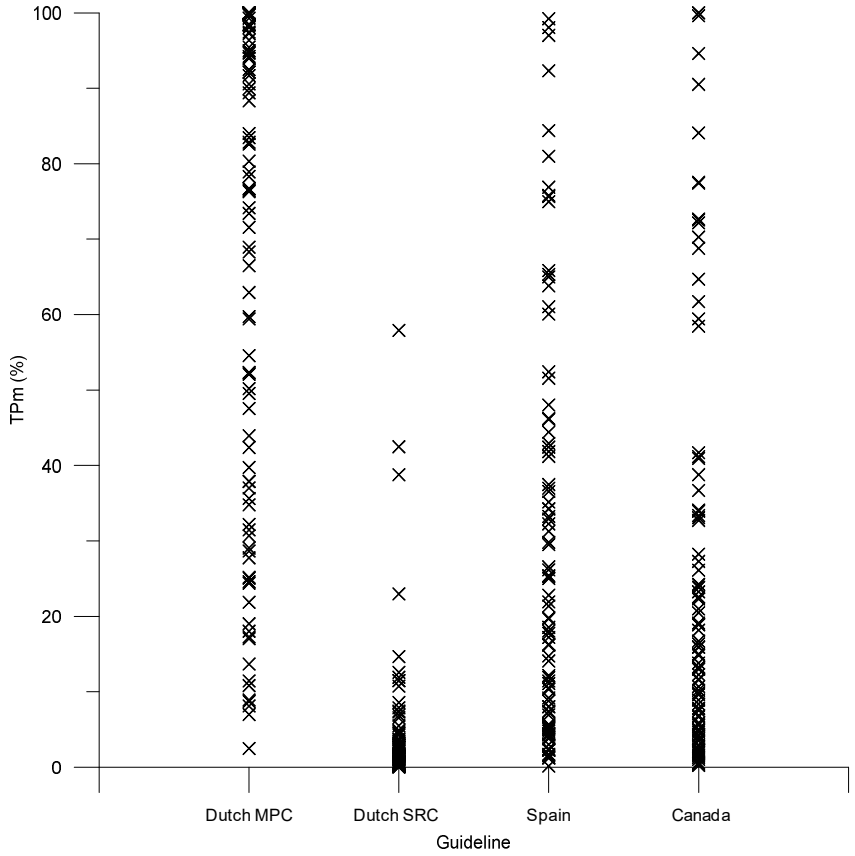

Figure S4. Toxic pressure of the PAHs mixture (TPm) for the 97 samples from Lisbon, considering different guidelines values.