

SUPPLEMENTARY FILE

Supplementary Table 1. Rating of the geo-accumulation index.

level	Soil Quality
I _{geo} = 0	Uncontaminated
0 < I _{geo} < 1	Uncontaminated to moderately contaminated
1 < I _{geo} < 2	Moderately contaminated
2 < I _{geo} < 3	Moderately to heavily contaminated
3 < I _{geo} < 4	Heavily contaminated
4 < I _{geo} < 5	Heavily to extremely contaminated
5 < I _{geo}	Extremely contaminated

Supplementary Table 2. Dose models' factors were adopted in the present study US EPA, 1989

Factor	Definition	Unit	Value	
			Children	Adult
C	Concentration of an element in study soil	mg/kg		
EF	Exposure frequency	Day/ year	180	180
ED	Exposure duration	years	6	24
BW	Average body weight	kg	15	70
AT	Average time	days	365 × ED	365 × ED
CF	Conversion factor	Kg/mg	1×10 ⁻⁴	1×10 ⁻⁶
R _{inh}	Inhalation rate	m ³ /day	7.6	20
PEF	Particle emission factor	m ³ /kg	1.36×10 ⁹	1.36×10 ⁹
AT	Average time carcinogenic	days	25, 550	25, 550

Supplementary Figure1: Locations of the sampling sites within Baghdad city

