

Figure S1: Edaplot of Cd, Cr, Cu, Ni, V and Zn concentrations, in mg/kg

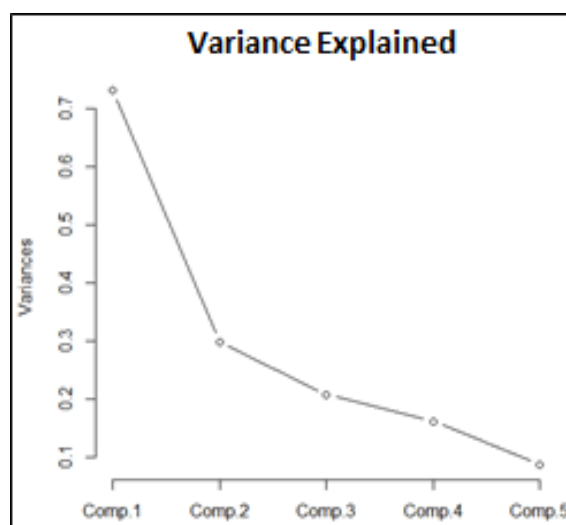


Figure S2: Cumulative variance explained by component

Table S1: Classification of soil contamination according to contamination indexes

Index	Category	Description
Geo-accumulatic index (IGEO)	$IGEO \leq 0$	Not contaminated
	$0 < IGEO \leq 1$	Slightly contaminated
	$1 < IGEO \leq 2$	Moderately contaminated
	$2 < IGEO \leq 3$	Moderately to highly contaminated
	$3 < IGEO \leq 4$	Highly contaminated
	$4 < IGEO \leq 5$	Highly contaminated to extremely contaminated
	$IGEO > 5$	Extremely contaminated
Enrichment Factor (EF)	$EF \leq 2$	Deficiency to minimal enrichment
	$2 < EF \leq 5$	Moderate enrichment
	$5 < EF \leq 20$	Significant enrichment
	$20 < EF \leq 40$	Very high enrichment
	$EF > 40$	Extremely high enrichment
Contamination Factor (CF)	$CF \leq 1$	Low contamination
	$1 < CF \leq 3$	Moderate contamination
	$3 < CF \leq 6$	Considerable contamination

	CF > 6	Very high contamination factor
Contamination	CDEG ≤ 6	Low contamination
Degree (CDEG)	6 < CDEG ≤ 12	Moderate contamination
	12 < CDEG ≤ 24	Considerable contamination
	CDEG > 24	Very high contamination factor

Table S2: Values of the factors used in the equations referred to intake

Exposure	Parameters	Unit	Values		Reference
			Adult	Child	
Ingestion	IngR	mg/day	100	200	[21]
Dermal	SA	cm <sup>2</sup>	5700	2800	[21]
	SAF	mg/cm <sup>2</sup>	0.07	0.2	[21]
	ABSd	-	0.001	0.001	[48]
Inhalation	InhR	m <sup>3</sup> /d	14.5	7.5	[31]
	PEF	m <sup>3</sup> /kg	1.36x10 <sup>9</sup>	1.36x10 <sup>9</sup>	[21]
	EF	day/year	350	350	[21]
Common	ED	Year	30	6 <sup>1</sup>	[21]
Factors	BW	kg	70	15	[21]

<sup>1</sup>: Non-carcinogenic effect

Table S3: Factors used for the calculation of carcinogenic risk.

Factor	Cd	Cr (VI)	Cu	Ni	V	Zn
RfDo (mg/Kg/d)	0.001a	0.003a	0.04b	0.02a	0.007a	0.3a
RfC (m <sup>3</sup> /d)	NE	0.0001a	NA	NA	NA	NA
ABS <sub>GI</sub>	0.025c	0.025c	0.57c	0.04c	0.026c	1e
UR (ug/m3)	0.0018a	0.012a	NA	0.00024a	NA	NA
OSF (mg/kgd)	NA	0.5d	NA	NA	NA	NA

NA: Not available a: [21] b: [47] c: [46] d: [49] e: [45]