

Table S1. Contamination categories on the basis of Igeo values and ecological risk indices.

Value	Pollution Level	Value	Potentially Ecological Risk level
Igeo≤0	unpolluted	$E(i) < 40; RI < 150$	Low potential ecological risk
$0 < Igeo \leq 1$	unpolluted to moderately polluted	$40 \leq E(i) < 80; 150 \leq RI < 300$	Moderate potential ecological risk
$1 < Igeo \leq 2$	moderately polluted	$80 \leq E(i) < 160; 300 \leq RI < 600$	Considerable potential ecological risk
$2 < Igeo \leq 3$	moderately to heavily polluted	$160 \leq E(i) < 320; RI \geq 600$	Very high potential ecological risk
$3 < Igeo \leq 4$	heavily polluted	$E(i) \geq 320$	dangerous
$4 < Igeo \leq 5$	heavily to extremely polluted	-	-
Igeo ≥ 5	extremely polluted	-	-

Table S2. Potentially ecological risks values of the elements of As, Cd, Cu, Pb, Ni, Zn, Cr, and Hg.

Sampling Sites	As	Cd	Cu	Pb	Ni	Zn	Cr	Hg	RI
SCG1	7.36	18.50	9.10	3.10	2.10	0.80	2.40	12.42	55.73
SCG2	10.10	50.02	8.70	3.20	4.70	0.90	3.10	11.08	91.78
SCG3	9.43	17.41	13.00	3.80	3.40	1.00	2.70	8.23	58.56
SCG4	9.23	31.09	9.20	1.94	2.15	0.07	2.50	10.39	66.57
SCG5	7.41	70.73	8.50	2.80	4.10	0.90	2.80	9.96	107.21
SCG6	10.37	57.92	8.70	2.20	3.10	0.40	2.50	7.80	92.92
SCG7	10.38	38.84	7.20	3.70	4.30	0.70	2.70	8.35	76.25
SCG8	13.12	47.29	8.50	3.60	4.00	0.70	2.90	13.00	93.10
AMD1	7.93	77.12	11.00	1.15	2.90	0.80	2.70	7.87	111.46
AMD2	11.42	55.73	16.00	5.00	9.30	2.00	3.00	9.47	112.50
AMD3	10.32	52.55	0.63	2.20	1.99	0.20	2.90	7.39	78.20
AMD4	12.00	124.51	6.70	8.20	1.63	0.80	4.00	13.17	170.90
AMD5	12.00	76.36	10.80	3.40	7.40	1.00	3.40	13.71	127.99
AMD6	13.30	49.58	6.30	1.84	5.10	0.80	3.20	10.62	90.74
TM1	10.95	46.22	4.40	2.70	4.50	0.80	2.70	7.64	79.80
TM2	8.38	43.84	7.90	1.85	7.80	2.00	3.00	11.24	86.70
TM3	13.10	105.71	16.00	4.30	14.60	2.00	3.00	13.12	172.36
TM4	8.72	119.84	9.70	1.90	8.10	0.90	3.00	9.07	161.58
TM5	12.20	129.70	17.00	7.00	13.20	2.00	3.20	15.24	199.51
TM6	8.48	112.72	12.40	6.50	10.20	1.50	3.20	8.62	163.56
TM7	10.88	41.15	14.40	2.80	16.60	2.00	2.50	11.85	102.01
CK1	9.09	10.86	17.60	4.20	9.30	2.30	2.70	10.06	66.14
CK2	10.67	37.42	8.40	3.60	3.70	2.00	2.00	7.00	74.84
CK3	14.40	76.90	10.60	4.90	7.70	1.30	1.80	8.60	126.36
CK4	12.40	32.57	5.80	2.30	7.00	1.30	2.40	6.40	70.12
CK5	15.00	74.45	10.30	3.40	5.80	1.10	4.00	10.12	123.86
CK6	10.12	27.73	11.00	3.50	5.17	1.10	2.70	10.02	71.39