Figure S1. Spatial distribution prediction map of Zn content in the research area.

Table S1 Comparison of predicted and actual values of the APCS-MLR model

HMs	Estimated value (E)	Measured value (O)	E/O	R²
Cd	0.2781	0.2775	1.0020	0.906
Zn	124.5185	124.5183	1.0000	0.997
Cu	16.7212	16.7233	0.9999	0.804
Cr	38.1463	38.1475	1.0000	0.916
Pb	18.0221	18.0216	1.0000	0.662
Ni	18.2554	18.2564	0.9999	0.894
Total	-	-	-	-

Table S2 APCS-MLR modeling heavy metal pollution source contributions

	PCA1	PCA2	PCA3	UNKNOW
Cd	0.115156	0.685199	0.012633	0.187012
Zn	0.439785	0.117422	0.371815	0.070977
Cu	0.736707	0.20172	0.038253	0.023319
Cr	0.72595	0.025993	0.035664	0.212393
Pd	0.575516	0.364213	0.01072	0.04955
Ni	0.73587	0.072046	0.023475	0.168608