Supplementary information for

Characteristics of Particulate Matter at Different Pollution Levels in Chengdu, Southwest of China

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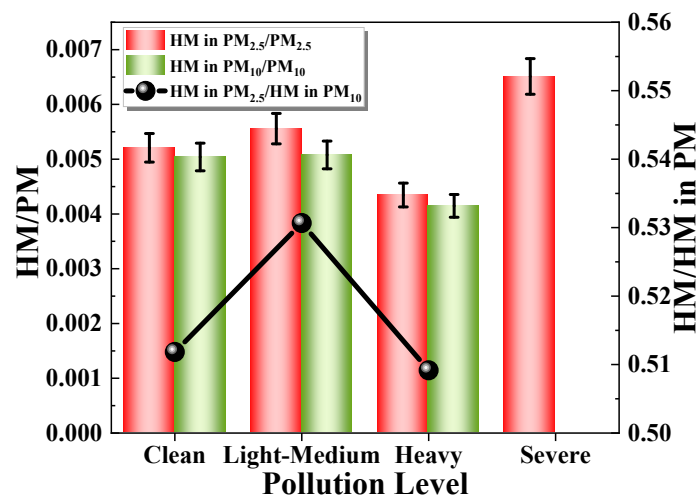
Number of figures: 2

Number of tables: 4

Figure S1.Changes of heavy metals per particle at different pollution levels
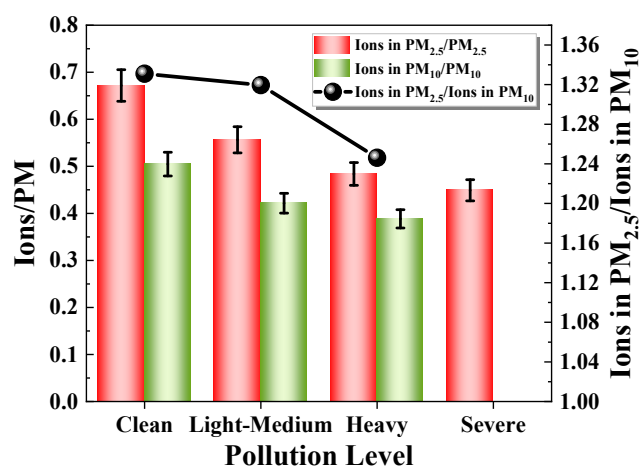

Figure S2. Change in ions per particle at different pollution levels

Table S1

Average mass concentrations of heavy metals in $PM_{2.5}$ at different pollution levels (ng/m³)

Level		As	Cd	Cr	Cu	Ni	Pb	V	Zn
Clean	Max	22.73	1.56	31.84	144.52	9.24	92.77	1.87	387.73
	Min	2.04	0.02	1.67	15.53	0.01	12.93	0.14	79.56
	Average	6.61	0.44	8.91	42.20	2.65	31.76	0.92	160.63
	SD	4.76	0.42	8.34	35.93	2.84	19.79	0.52	80.93
Light-Medium	Max	63.32	3.13	372.04	474.83	188.08	587.97	3.43	950.76
	Min	2.19	0.06	3.02	22.71	1.29	16.66	0.34	21.95
	Average	17.41	1.18	40.02	120.66	15.67	92.64	1.26	321.56
	SD	14.38	0.75	79.30	123.56	40.77	125.52	0.80	241.56
Heavy	Max	49.63	5.26	49.01	658.49	18.50	169.31	2.47	866.01
	Min	7.66	0.80	8.69	51.47	3.06	42.34	0.17	178.41
	Average	24.13	2.00	25.22	204.49	8.48	95.34	1.54	447.94
	SD	16.09	1.20	12.94	188.02	4.95	40.02	0.62	228.78

SD means standard deviation.

Table S2. Average mass concentrations of heavy metals in PM_{10} at different pollution levels (ng/m³)

Level		As	Cd	Cr	Cu	Ni	Pb	V	Zn
Clean	Max	31.81	1.81	56.90	697.93	13.26	116.10	10.40	763.15
	Min	3.27	0.17	6.90	28.03	1.94	15.86	1.35	71.98
	Average	9.44	0.81	19.38	138.77	5.61	43.53	4.03	274.93
	SD	8.44	0.58	14.70	186.90	3.73	31.00	2.61	180.63
Light-Medium	Max	79.94	6.72	77.64	1752.64	23.01	679.46	17.44	1572.08
	Min	3.45	0.34	9.22	30.81	2.78	27.15	1.97	119.90
	Average	25.45	1.88	35.87	393.02	10.26	128.28	8.32	547.16
	SD	19.69	1.35	22.32	438.03	5.85	127.63	4.10	356.08
Heavy	Max	95.24	3.84	51.39	1348.96	13.08	289.37	10.84	1209.15
	Min	12.01	1.11	27.61	133.71	8.66	85.59	5.51	391.94
	Average	41.72	2.29	39.39	580.20	10.26	159.51	8.66	747.13
	SD	46.45	1.41	11.89	668.66	2.45	112.82	2.79	418.95

SD means standard deviation

Table S3. Average mass concentration of ions in $PM_{2.5}$ at different pollution levels ($\mu g/m^3$)

Level		F⁻	Cl⁻	NO₃⁻	SO₄²⁻	Na⁺	NH₄⁺	K⁺	Ca²⁺	Mg²⁺
	Max	0.35	2.55	14.36	28.10	1.97	15.43	2.23	1.23	0.19
Clean	Min	0.03	0.54	3.63	6.57	0.04	0.85	0.47	0.01	0.02
	Average	0.08	1.13	7.64	14.73	0.83	6.92	1.08	0.30	0.08
	SD	0.07	0.60	3.12	5.27	0.66	4.01	0.46	0.36	0.04
	Max	0.25	4.10	23.88	51.30	1.95	20.96	22.82	1.46	0.21
Light-Medium	Min	0.05	0.69	5.37	10.49	0.04	4.95	0.89	0.01	0.02
	Average	0.12	2.32	13.85	27.36	0.63	13.49	2.77	0.46	0.10
	SD	0.05	1.03	4.18	10.51	0.52	4.14	4.87	0.36	0.04
	Max	0.34	5.60	37.91	62.27	1.89	34.06	2.32	1.14	0.17
Heavy	Min	0.04	0.62	3.23	5.33	0.02	8.58	1.05	0.07	0.04
	Average	0.16	3.35	23.35	37.13	0.69	23.19	1.71	0.44	0.10
	SD	0.08	1.50	11.16	19.28	0.66	6.76	0.39	0.28	0.04

SD means standard deviation.

Table S4. Average mass concentration of ions in PM_{10} at different pollution levels ($\mu g/m^3$)

Level		F⁻	Cl⁻	NO₃⁻	SO₄²⁻	Na⁺	NH₄⁺	K⁺	Ca²⁺	Mg²⁺
	Max	0.60	4.05	21.15	28.53	1.96	13.30	12.64	10.07	0.49
Clean	Min	0.12	0.95	5.94	16.83	0.08	2.56	1.02	1.28	0.05
	Average	0.28	1.87	11.78	20.62	0.89	6.45	2.60	5.00	0.22
	SD	0.15	0.94	3.74	3.27	0.65	2.65	2.96	2.50	0.13
	Max	1.25	8.86	53.62	58.64	15.12	70.22	15.17	12.47	0.93
Light-Medium	Min	0.06	0.89	5.26	15.17	0.09	0.72	0.74	0.20	0.04
	Average	0.47	4.06	26.16	32.48	1.66	19.20	4.14	7.01	0.33
	SD	0.30	2.34	13.05	10.61	2.49	14.42	2.81	3.10	0.19
	Max	0.99	10.46	68.40	47.33	1.76	44.51	7.86	12.09	0.67
Heavy	Min	0.32	4.41	37.00	31.87	0.30	21.69	3.33	8.85	0.12
	Average	0.76	7.14	49.85	41.64	1.00	32.68	5.09	10.18	0.46
	SD	0.38	3.07	16.45	8.50	0.73	11.43	2.43	1.70	0.30

SD means standard deviation.