

Electronic Supplementary Information Available Online for
Composition and size distribution of metals in diesel exhaust particulates

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Table S1 Size distribution of metal contents in DEPs

Driving modes	1800 rpm/60%						3000 rpm/60%						1800 rpm/100%						3000 rpm/100%					
	Size range of LPI (nm)						Size range of LPI (nm)						Size range of LPI (nm)						Size range of LPI (nm)					
(ng/m ³)	34-66	66-94	94-170	170-330	330-550	550-1000	34-66	66-94	94-170	170-330	330-550	550-1000	34-66	66-94	94-170	170-330	330-550	550-1000	34-66	66-94	94-170	170-330	330-550	550-1000
Fe	285.5	299.3	432.8	328.1	514.9	483.7	442.1	410.0	457.5	708.7	404.0	561.5	746.8	437.2	518.5	506.9	644.8	665.6	796.8	691.3	465.7	724.0	601.2	601.6
Pb	121.9	148.5	169.6	134.3	171.3	162.7	106.2	117.6	104.2	142.9	89.1	114.4	90.9	78.0	78.4	80.2	71.9	68.9	86.2	67.7	38.2	74.3	34.1	42.6
V	50.7	97.8	147.5	82.8	142.5	46.1	52.0	55.9	116.4	149.1	113.3	129.6	182.6	88.7	122.1	90.7	129.0	110.9	180.2	140.8	69.6	108.0	84.8	105.3
Li	26.0	68.2	108.8	83.5	130.3	52.2	43.6	78.8	123.6	165.5	142.8	169.0	201.1	137.2	188.0	164.1	191.3	190.6	220.9	230.8	151.0	207.9	173.9	205.2
Mn	23.9	45.4	71.8	43.7	73.4	49.6	15.0	33.5	42.5	88.6	46.2	65.4	69.5	32.5	53.0	39.7	58.0	55.5	59.4	58.7	18.3	63.2	24.8	33.2
Cu	30.1	27.0	156.9	21.9	121.1	22.0	14.7	18.7	10.0	26.3	33.5	54.4	51.0	106.9	82.0	60.4	32.6	44.7	12.5	14.3	62.0	48.3	40.3	28.9
Ni	20.2	18.8	51.5	34.6	46.1	50.6	13.0	21.7	35.4	85.8	40.7	62.8	48.5	18.1	43.1	38.8	47.7	41.6	49.9	61.5	38.9	58.9	27.0	49.9
Mo	5.4	6.8	7.7	5.2	7.4	15.8	4.6	4.7	5.5	9.8	5.0	5.6	7.6	3.3	5.1	6.1	6.8	6.6	7.0	5.0	3.3	11.1	3.4	3.1
Sn	6.4	6.6	7.1	6.8	8.9	9.8	6.0	3.9	3.7	6.2	4.6	5.9	8.0	3.9	3.0	1.6	4.0	3.9	4.6	3.8	2.7	5.3	5.8	3.8
As	4.4	8.5	11.1	6.4	10.2	4.2	4.8	4.6	7.4	9.6	6.4	7.5	9.3	5.6	6.2	5.3	5.9	5.3	7.9	6.9	2.8	4.4	3.2	4.4
Cs	2.1	2.4	2.7	2.1	2.6	2.3	1.4	1.8	1.8	2.5	1.6	1.9	1.8	1.2	1.5	1.3	1.4	1.3	1.5	1.3	0.6	1.2	0.5	0.8
Ag	2.0	2.2	2.6	1.9	2.7	2.2	3.0	2.0	2.0	3.2	1.8	2.7	3.2	1.1	1.4	1.2	1.7	1.3	1.9	1.4	0.4	0.6	0.7	1.3
Co	1.6	2.6	4.2	2.8	4.6	7.9	1.5	1.7	3.2	5.4	3.3	4.2	5.4	1.6	4.0	2.1	4.0	3.5	4.1	4.5	1.2	9.6	1.9	2.7
In	1.7	1.6	1.6	1.2	1.9	1.4	0.8	0.8	0.8	0.8	0.8	0.7	0.6	0.4	0.5	0.3	0.4	0.4	0.4	0.3	0.1	0.2	0.2	0.2
Cd	1.2	1.3	1.9	1.1	1.7	0.9	0.8	1.0	0.7	1.5	0.6	0.9	0.7	0.5	0.7	1.0	0.7	0.5	0.7	0.7	0.2	0.5	0.6	0.6
Tl	1.0	0.9	1.1	0.9	1.0	0.6	0.6	0.9	0.7	0.9	0.6	0.8	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.4	0.3	0.5	0.2	0.3
Be	0.3	0.3	0.9	0.7	1.4	0.8	0.4	1.0	1.3	1.8	1.5	1.7	1.9	1.1	1.5	1.0	1.9	2.0	2.2	2.0	1.2	2.7	1.7	1.8
Sum	584.7 (11%)	738.1 (14%)	1179.6 (22%)	758.0 (14%)	1242.1 (23%)	912.9 (17%)	710.7 (12%)	758.4 (13%)	916.6 (16%)	1408.6 (24%)	895.7 (15%)	1188.9 (20%)	1429.6 (21%)	918.0 (13%)	1109.4 (16%)	1001.2 (15%)	1202.6 (18%)	1203.0 (18%)	1436.5 (21%)	1291.6 (18%)	856.5 (12%)	1320.8 (19%)	1004.5 (14%)	1085.5 (16%)

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† Electronic supplementary information (ESI) available: Supplementary Table S1.

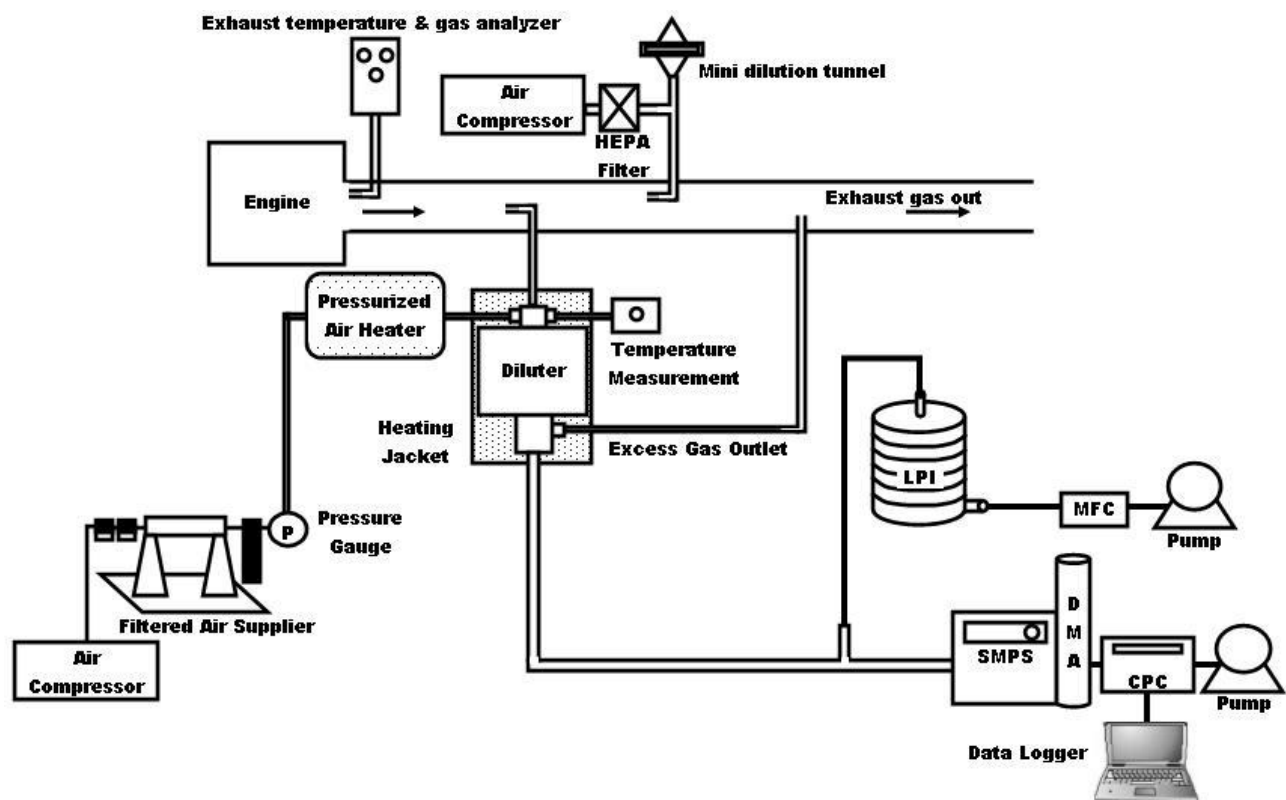


Fig. S1. Schematic system for DEP monitoring and sampling.

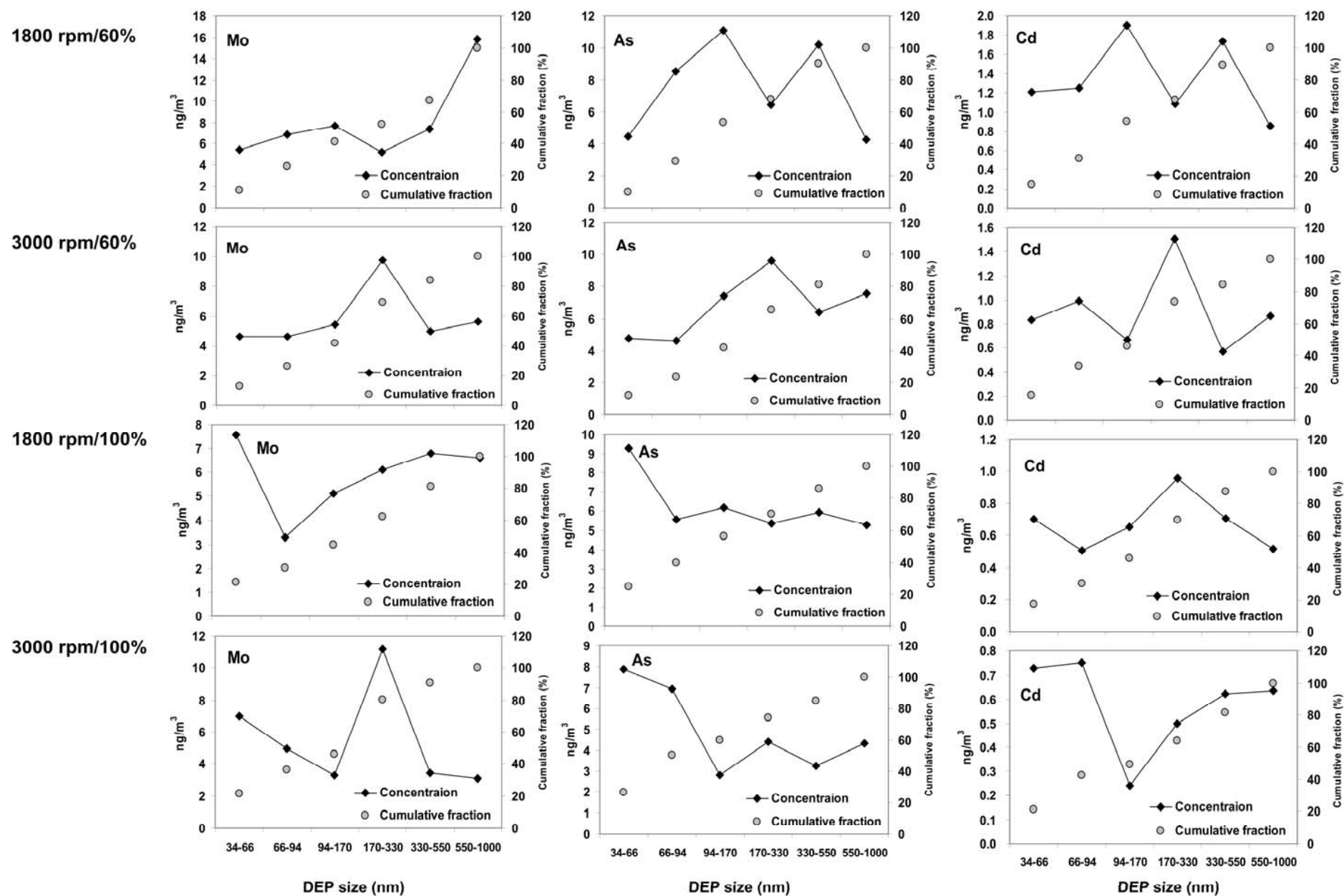


Fig. S2. Size distribution and cumulative fractions of Mo, As, and Cd in DEPs. All data points represent an average of triplicate measurements with standard deviations of 0.00–0.04 ng/m³ for Mo, 0.00–0.04 ng/m³ for As and 0.00–0.01 ng/m³ for Cd.