

Supporting Information

Table 1: Table of heavy metal contents in studied samples (outliers bolded).

City	Sample	Cd	As	Ni	Pb	Cr	Cu	Zn	Mn	Ti	Fe
Cra cow	1	1.6	1.7	10.1	0.1	23.7	10.3	128.0	125.0	1551.0	4231.0
	2	1.8	2.7	8.0	27.8	20.4	22.4	359.0	610.0	1097.0	5118.0
	3	6.3	3.3	9.6	0.1	13.1	19.1	833.0	243.0	462.0	3561.0
	4	13.2	2.8	8.6	54.9	10.1	13.2	314.0	772.0	1145.0	3469.0
	5	0.1	1.3	8.9	0.1	12.9	27.5	810.0	388.0	3576.0	3701.0
	6	0.1	1.8	6.8	0.1	9.0	9.7	742.0	477.0	874.1	3092.0
	7	0.1	3.0	9.6	0.1	13.5	8.2	228.0	184.0	579.8	2579.0
	8	0.1	1.3	5.3	0.1	3.3	106.0	40.5	68.9	190.8	1059.0
	9	0.1	2.2	6.1	26.3	13.2	33.2	156.0	44.5	494.4	1502.0
	10	0.1	1.7	7.5	0.1	10.1	15.4	147.0	626.0	831.6	2141.0
	11	2.0	6.3	21.0	0.1	20.2	20.7	472.0	288.0	3257.0	6925.0
	12	0.1	1.9	8.0	0.1	10.1	8.5	116.0	246.0	675.2	5788.0
	13	0.1	1.3	4.6	0.1	0.1	1.2	53.8	47.5	320.6	764.4
	14	3.5	7.9	8.1	14.9	16.9	16.7	722.0	408.0	790.7	5734.0
	15	0.1	2.9	11.1	0.1	15.4	28.2	226.0	221.0	1738.0	4319.0
	16	1.5	5.2	10.4	77.6	32.5	51.3	715.0	192.0	1659.0	4866.0
	17	1.3	3.1	9.9	0.1	7.1	11.3	349.0	225.0	803.1	3037.0
	18	0.1	3.3	9.2	0.1	15.6	14.7	172.0	261.0	1487.0	4015.0
	19	0.1	2.4	5.2	0.1	12.7	13.6	408.0	119.0	445.9	3731.0
	20	0.1	1.4	6.8	0.1	9.6	4.5	71.5	445.0	1125.0	3277.0
	21	0.1	1.7	24.6	0.1	11.5	2.2	91.5	311.0	1398.0	3527.0
Lub lin	1	-	-	5.9	-	14.4	4.8	29.2	201.0	-	4802.0
	2	-	-	6.7	-	14.2	12.2	34.3	76.6	-	3834.0
	3	-	-	3.8	-	10.4	2.7	39.8	179.0	-	1442.0
	5	-	-	4.6	-	14.3	2.4	28.2	531.0	-	6869.0
	6	-	-	4.2	-	6.9	485.0	56.0	114.0	-	2995.0
	7	-	-	8.0	-	14.7	66.9	571.0	126.0	-	3398.0
	8	-	-	8.7	-	57.3	15.1	185.0	212.0	-	4083.0
	9	-	-	4.2	-	15.3	0.0	31.2	37.2	-	1349.0
	11	-	-	4.5	-	10.1	76.1	158.0	289.0	-	3163.0
	12	-	-	2.8	-	4.3	5.2	74.5	65.9	-	2712.0
	13	-	-	6.2	-	11.1	10.1	77.1	142.0	-	5178.0
	14	-	-	5.4	-	5.6	7.3	40.4	106.0	-	2768.0
	15	-	-	5.0	-	10.8	6.6	548.0	165.0	-	2270.0
	16	-	-	6.9	-	8.0	0.0	196.0	52.7	-	2996.0
	17	-	-	6.1	-	3.7	7.8	396.0	71.9	-	3208.0

	18	-	-	18.6	-	33.0	0.0	136.0	115.0	-	3525.0
Warsaw	1	0.0	2.2	32.8	20.1	12.6	4.7	95.8	177.0	4220.0	3219.0
	2	0.0	9.6	25.4	170.0	33.3	186.0	354.0	280.0	637.4	4716.0
	3	0.0	1.3	26.9	104.0	13.6	-	67.2	70.2	805.3	5013.0
	4	0.0	0.9	17.2	89.3	12.8	1.6	107.0	188.0	773.3	3718.0
	5	0.0	2.6	29.6	125.0	17.5	1.2	731.0	87.3	396.0	6033.0
	6	0.0	1.7	33.8	88.3	13.1	1.9	110.0	179.0	1015.0	5328.0
	7	0.0	1.5	27.6	141.0	19.9	2.7	777.0	137.0	973.4	4798.0
	8	0.0	1.5	17.4	102.0	7.1	-	169.0	90.3	841.2	4958.0
	9	0.0	2.0	38.0	46.5	19.5	3.2	71.5	187.0	635.4	3109.0
	10	0.0	2.8	27.6	178.0	24.1	2.1	129.0	26.5	280.4	6327.0
	11	0.0	2.2	31.1	123.0	10.4	2.4	99.2	132.0	1125.0	5005.0
	12	0.0	1.5	32.9	55.6	9.0	2.1	564.0	156.0	1091.0	3462.0
	13	0.0	0.8	27.5	88.9	7.0	-	227.0	202.0	1212.0	4014.0
	14	0.0	0.6	41.5	94.8	18.6	1.9	106.0	131.0	1445.0	3093.0
	15	0.0	2.0	33.9	308.0	13.4	3.1	792.0	398.0	1314.0	4735.0
	16	0.0	0.0	31.8	36.3	10.9	3.0	125.0	167.0	835.6	3631.0
	17	4.1	0.0	44.6	152.0	19.2	3.4	227.0	79.6	732.5	2912.0
	18	1.7	4.0	33.1	279.0	7.4	10.6	164.0	87.5	598.5	8841.0
	19	0.0	1.2	33.7	69.3	10.4	12.4	86.6	149.0	751.1	3052.0
	20	0.0	1.3	38.7	51.2	8.3	5.4	45.7	218.0	774.3	3196.0
	21	2.9	3.1	22.1	109.0	9.8	2.8	81.9	174.0	902.3	13516.0
	22	1.2	1.5	29.7	204.0	11.4	15.2	91.3	75.2	684.5	4187.0
Lviv	1	0.0	0.8	0.0	6.5	10.7	11.1	91.4	91.6	765.0	3084.0
	2	0.0	1.5	0.0	15.9	8.2	12.2	757.0	101.0	1011.0	3616.0
	3	7.7	0.9	0.0	11.7	7.0	14.5	214.0	75.1	934.0	2901.0
	4	5.2	1.0	0.0	7.5	10.9	9.3	80.9	73.2	687.0	2929.0
	5	4.5	2.5	0.0	3.1	6.2	5.2	37.5	53.8	905.0	2833.0
	6	8.1	2.8	13.2	15.7	13.2	17.1	750.0	365.0	887.0	3427.0
	7	0.0	1.4	40.9	-	9.3	10.7	36.5	104.0	10.4	3041.0
	8	1.1	1.0	29.9	48.0	12.5	11.7	34.8	107.0	765.3	2550.0
	9	0.0	1.2	67.7	212.0	53.5	40.5	170.0	180.0	992.1	13587.0
	10	0.0	1.0	24.3	9.3	4.1	9.0	28.4	66.7	581.3	4074.0
	11	0.0	0.7	23.6	-	1.5	6.5	21.0	46.8	634.5	2886.0
	12	0.0	1.4	40.1	46.7	18.5	8.0	17.7	62.5	981.7	3028.0
Monchegoorsk	1	1.6	5.5	125.0	9836.0	28.8	121.0	168.0	251.0	3894.0	9716.0
	2	3.0	6.2	44.1	25.1	14.4	44.5	97.1	235.0	3312.0	7213.0
	3	3.0	7.8	147.0	33.2	17.2	138.0	802.0	169.0	2665.0	7075.0
	4	3.0	5.8	32.9	3.0	24.5	56.1	143.0	207.0	2431.0	8409.0
	5	1.5	4.1	35.4	1.5	19.2	41.5	487.0	239.0	2250.0	8343.0

	6	2.4	3.5	65.9	2.4	19.5	60.1	147.0	173.0	2213.0	7148.0
	7	2.7	3.1	42.6	2.7	22.2	48.4	151.0	181.0	3037.0	8081.0
	8	3.2	3.3	209.0	3.2	45.3	209.0	135.0	312.0	3107.0	23959.0
	9	1.7	4.1	24.6	1.7	15.4	44.2	112.0	249.0	4642.0	7132.0
	10	3.2	3.9	28.6	3.2	11.9	42.5	148.0	170.0	3313.0	6659.0
	11	0.0	5.4	22.2	26.4	17.5	35.9	69.2	203.0	2521.0	7542.0
	12	6.1	6.1	46.2	92.7	46.2	110.0	568.0	349.0	3021.0	13081.0
	13	3.1	8.8	11.3	24.0	17.9	28.9	99.5	120.0	1815.0	8439.0
	14	2.8	4.4	48.5	25.8	36.7	53.4	18.8	1047.0	2015.0	6507.0
	15	2.4	2.8	21.8	25.6	10.8	36.6	18.7	223.0	2812.0	6876.0
Mur man sk	1	5.9	2.0	55.6	47.5	48.8	70.2	661.0	149.0	3128.0	6986.0
	2	2.7	2.2	173.0	72.3	23.4	197.0	801.0	260.0	4314.0	8398.0
	3	3.3	17.3	19.2	20.2	20.3	41.2	798.0	563.0	6186.0	9160.0
	4	3.2	3.1	28.8	90.9	44.5	41.1	509.0	133.0	3307.0	7912.0
	5	3.4	11.4	25.4	43.9	18.3	36.1	631.0	196.0	4226.0	8512.0
	6	60.8	1.9	28.4	54.3	32.9	74.1	528.0	223.0	2937.0	11330.0
	7	1.7	2.1	22.1	0.1	26.1	20.9	167.0	171.0	3315.0	3785.0
	8	2.7	2.6	15.8	0.1	24.6	36.5	60.3	173.0	3483.0	8434.0
	9	3.6	2.4	13.5	0.1	20.5	27.9	157.0	112.0	3315.0	5646.0
	10	3.4	0.5	6.4	29.1	7.4	10.0	132.0	171.0	1165.0	1770.0
	11	3.0	3.4	23.7	6.7	29.2	48.4	864.0	151.0	2122.0	7991.0
	12	5.2	3.1	15.1	33.2	15.8	24.9	820.0	178.0	2937.0	7659.0
	13	2.2	2.8	18.1	24.5	20.9	49.4	731.0	214.0	4005.0	10120.0
	14	8.8	3.1	61.0	22.9	108.0	21.4	60.1	171.0	3025.0	7700.0
	15	1.2	4.0	14.2	12.3	19.3	37.1	179.0	138.0	2848.0	9585.0
	16	1.8	3.3	12.5	0.1	26.7	15.5	61.8	177.0	3104.0	9420.0
	17	2.1	4.9	17.5	0.1	23.1	26.8	153.0	899.0	3502.0	9946.0
	18	3.7	4.1	16.9	68.2	29.3	38.4	804.0	291.0	3515.0	6640.0
	19	3.6	3.1	22.3	35.9	11.7	21.7	69.3	217.0	3555.0	7141.0
	20	1.9	5.4	25.7	30.6	46.8	22.8	424.0	1115.0	3928.0	9547.0
	21	2.6	3.8	18.9	10.9	27.4	22.5	118.0	199.0	3207.0	8631.0
	22	1.8	2.5	14.8	9.7	27.8	26.3	58.4	141.0	3335.0	8507.0
	23	2.5	2.3	16.5	70.1	22.7	20.3	816.0	146.0	3089.0	13233.0
	24	2.7	4.3	16.3	33.3	18.9	26.9	322.0	127.0	4103.0	7495.0
	25	2.8	2.4	12.9	9.6	28.2	22.0	136.0	189.0	3135.0	8709.0
	26	3.1	4.2	16.8	11.1	26.4	31.4	73.3	179.0	3203.0	9011.0
	27	5.8	6.8	49.4	11.6	63.4	31.6	840.0	164.0	2936.0	10177.0
	28	8.2	2.6	38.7	50.7	44.7	46.1	921.0	1228.0	3031.0	13955.0
	29	7.4	1.7	155.0	24.1	26.2	57.3	164.0	415.0	3392.0	13369.0
	30	3.1	2.1	79.4	0.1	81.6	85.2	156.0	143.0	2715.0	23488.0
	31	16.2	2.6	14.9	43.7	25.0	13.7	233.0	191.0	2293.0	19679.0

	32	2.1	3.4	21.8	17.1	34.7	26.9	343.0	227.0	4968.0	12146.0
	33	3.3	2.3	21.6	3158.0	16.2	158.0	138.0	159.0	2415.0	12102.0
	34	0.0	5.0	14.6	9.7	30.1	30.2	44.7	121.0	3884.0	5689.0