Supplementary Data

This supplementary data is a part of a paper entitled "Determination of Heavy Metal Concentrations in Household Dusts in Irbid and Mafraq Cities, Jordan".

Table S1. Statistical parameters of heavy metals concentrations (mg/kg dry weight) in the house dust samples collected from Irbid and Mafraq cities in the all sampling sites during the summer season

Sample number	Latitude (°N)	Longitude (°E)	Pb	Cd	Zn	Cu	Fe	Cr
S1	32.574722	35.860181	58.0	4.00	436	107	4553	38.0
S2	32.581111	35.868611	71.0	4.00	483	126	6714	38.0
S3	32.575059	35.869444	125	5.00	352	46.0	12653	47.0
S4	32.573699	35.867696	121	11.0	403	106	5179	32.0
S5	32.571111	35.871389	88.0	12.0	624	339	7597	56.0
S6	32.568836	35.862295	45.0	13.0	497	115	11570	58.0
S7	32.577611	35.870403	85.0	6.00	294	67.0	6090	38.0
S8	32.571553	35.871961	150	14.0	406	90.0	9170	44.0
S9	32.573916	35.873322	73.0	14.0	386	105	5721	41.0
S10	32.569497	35.873491	92.0	4.00	146	29.0	7013	31.0
S11	32.569249	35.872572	86.0	11.0	686	42.0	7643	33.0
S12	32.571633	35.871317	110	11.0	298	89.0	6304	35.0
S13	32.572258	35.867919	75.0	11.0	379	70.0	8294	31.0
S14	32.580446	35.869213	92.0	11.0	334	83.0	8683	35.0
S15	32.579514	35.868511	82.0	5.00	147	40.0	31062	110
S16	32.552965	35.873681	63.0	7.00	439	114	5968	39.0
S17	32.559511	35.878446	79.0	7.00	471	92.0	10037	71.0
S18	32.557287	35.872729	96.0	10.0	533	143	11270	54.0
S19	32.556345	35.876582	66.0	11.0	365	112	7297	47.0
S20	32.555442	35.864659	57.0	15.0	346	84.0	6774	35.0
S21	32.553504	35.880375	56.0	15.0	412	150	3907	23.0
S22	32.550137	35.878065	57.0	14.0	447	137	5185	38.0
S23	32.557719	35.879299	76.0	15.0	337	58.0	5346	23.0
S24	32.558713	35.861175	74.0	5.00	378	79.0	4417	24.0
S25	32.561078	35.861912	72.0	5.00	465	91.0	4171	27.0
S26	32.562808	35.880387	44.0	9.00	379	112	6275	32.0
S27	32.560391	35.875832	72.0	15.0	243	34.0	8829	32.0
S28	32.550343	35.874026	66.0	15.0	376	59.0	8574	38.0
S29	32.551565	35.857388	65.0	16.0	220	39.0	8859	37.0
S30	32.552785	35.859018	65.0	9.00	397	74.0	9129	42.0
S31	32.534522	35.895116	44.0	9.00	379	112	6275	32.0
S32	32.534872	35.893478	40.0	12.0	382	91.0	4564	33.0
S33	32.530166	35.902633	41.0	15.0	159	40.0	1626	18.0
S34	32.541122	35.893572	45.0	14.0	344	124	3315	23.0
S35	32.534218	35.898213	36.0	13.0	238	52.0	2858	22.0
S36	32.535929	35.895832	48.0	14.0	414	57.0	6866	38.0

Sample number	Latitude (°N)	Longitude (°E)	Pb	Cd	Zn	Cu	Fe	Cr
S37	32.540952	35.887877	44.0	14.0	392	66.0	9091	24.0
S38	32.540994	35.888351	62.0	6.00	388	80.0	6001	29.0
S39	32.543681	35.884583	55.0	11.0	387	83.0	5115	32.0
S40	32.539738	35.898522	81.0	13.0	363	90.0	3717	24.0
S41	32.543463	35.891536	60.0	4.00	340	70.0	9642	390
S42	32.536347	35.903113	44.0	14.0	449	162	6882	38.0
S43	32.531357	35.906495	55.0	17.0	335	53.0	10142	46.0
S44	32.536454	35.887964	32.0	12.0	493	76.0	5834	38.0
S45	32.472345	36.052888	70.0	16.0	305	87.0	4977	24.0
S46	32.516984	35.941786	103	17.0	582	127	11177	41.0
S47	32.526423	35.915228	120	12.0	341	73.0	8171	34.0
S48	32.433726	36.097648	54.0	16.0	338	56.0	6060	29.0
S49	32.389108	36.199549	53.0	12.0	300	48.0	10181	40.0
S50	32.416413	36.169941	52.0	12.0	228	45.0	5395	27.0
S51	32.473953	36.056218	74.0	7.00	123	31.0	23649	80.0
S52	32.420467	36.143563	46.0	6.00	269	60.0	5112	24.0
S53	32.467307	36.059183	52.0	5.00	146	31.0	19008	72.0
S54	32.513784	35.989306	99.0	6.00	158	32.0	17766	86.0
S55	32.387311	36.202722	75.0	12.0	251	164	10232	40.0
S56	32.409183	36.164821	49.0	9.00	267	74.0	3958	22.0
S57	32.370501	36.209249	58.0	11.0	500	59.0	8753	34.0
S58	32.386251	36.215979	54.0	14.0	230	29.0	6849	36.0
S59	32.340279	36.209114	49.0	8.00	318	131	6087	38.0
S60	32.335466	36.201761	37.0	10.0	290	38.0	3022	22.0
S61	32.338781	36.210434	120	14.0	308	62.0	6477	34.0
S62	32.341725	36.207361	60.0	12.0	401	134	5589	29.0
S63	32.343582	36.208301	52.0	11.0	391	79.0	3825	18.0
S64	32.339066	36.206194	35.0	4.00	460	123	4644	27.0
S65	32.339573	36.205621	73.0	12.0	392	66.0	3380	22.0
S66	32.344681	36.206812	62.0	11.0	538	68.0	8976	52.0
S67	32.335064	36.208331	40.0	7.00	470	135	7203	32.0
S68	32.337331	36.201253	37.0	13.0	500	111	4958	41.0
S69	32.338586	36.204705	52.0	4.00	383	66.0	6251	11.0
S70	32.337967	36.207832	76.0	11.0	393	71.0	5401	29.0
S71	32.341815	36.209456	78.0	7.00	465	150	13194	47.0
S72	32.333439	36.205776	49.0	12.0	308	58.0	3693	23.0
S73	32.343119	36.208328	72.0	7.00	305	52.0	7018	34.0
S74	32.346371	36.214957	55.0	6.00	338	6.00	11486	45.0
S75	32.349472	36.207892	78.0	8.00	394	60.0	6808	36.0
S76	32.349241	36.214203	60.0	10.0	288	89.0	4223	18.0
S77	32.350647	36.207949	44.0	9.00	320	53.0	3876	24.0
S78	32.347015	36.212107	71.0	11.0	412	69.0	4558	32.0
S79	32.357254	36.209631	69.0	14.0	324	58.0	8345	42.0
S80	32.349022	36.203043	48.0	13.0	362	85.0	5358	25.0

Sample number	Latitude (°N)	Longitude (°E)	Pb	Cd	Zn	Cu	Fe	Cr
S81	32.345164	36.208945	69.0	13.0	317	55.0	7258	38.0
S82	32.358018	36.206916	58.0	16.0	322	46.0	10270	46.0
S83	32.350711	36.206179	70.0	15.0	635	73.0	4653	23.0
S84	32.345784	36.212291	71.0	14.0	302	43.0	7383	39.0
S85	32.352986	36.201241	80.0	15.0	359	79.0	9915	62.0
S86	32.346112	36.201142	60.0	11.0	383	75.0	8586	49.0
S87	32.363729	36.206542	68.0	16.0	283	63.0	12022	46.0
S88	32.358015	36.203092	55.0	5.00	425	82.0	5619	34.0
Average			66.8	10.8	366	81.6	7586	37.2
SD			22.4	3.75	108	43.9	4304	15.4
Median			64.0	11.0	371	73.5	6744	35.0
C.V. (%)			33.0	35.0	29.0	54.0	57.0	41.0
Min.			32.0	4.00	123	6.00	1626	11.0
Max.			150	17.0	686	339	31062	110

Table S2. Statistical parameters of heavy metals concentrations (mg/Kg dry weight) in the house dust samples collected from Irbid and Mafraq cities in the all sampling sites during the winter season

Sample number	Corresponding summer sampling site	Type of heating system	Pb	Cd	Zn	Cu	Fe	Cr	Co	Ni	Mn
W1	S1	Gas	67.0	3.00	189	85.4	659	14.0	17.4	48.2	67.1
W2	S4	Gas	105	11.0	482	218	4315	20.0	20.0	33.6	91.5
W3	S16	Kerosene	74.0	3.00	175	317	8076	53.0	22.0	40.7	74.3
W4	S20	Gas	70.0	2.00	162	104	2571	17.0	13.6	92.1	64.5
W5	S21	Kerosene	181	3.20	441	64.0	2088	28.0	13.8	33.6	80.1
W6	S32	Gas	50.0	2.00	328	53.0	2547	23.0	14.0	24.6	97.5
W7	S36	Kerosene	100	3.30	243	319	5346	19.0	18.7	56.6	110
W8	S39	Gas	54.0	2.22	264	203	2433	20.0	15.4	31.5	117
W9	S48	Gas	53.7	3.00	218	85.0	5726	26.0	20.4	40.4	177
W10	S49	Wood	406	16.0	452	71.0	13211	52.0	25.8	45.6	115
W11	S50	Gas	55.5	1.80	334	61.0	6440	26.0	18.5	32.9	162
W12	S51	Central heating	65.5	2.00	168	59.0	3581	22.4	17.2	35.5	111
W13	S55	Gas	96.0	3.00	499	43.0	5812	27.0	17.2	50.5	171
W14	S56	Gas	48.0	15.0	150	31.0	260	7.00	15.5	39.3	95.5
W15	S59	Kerosene	94.0	11.0	555	75.0	6031	13.0	18.8	55.0	121
W16	S62	Gas	105	2.00	318	232	4118	27.0	16.5	75.4	81.8
W17	S63	Gas	79.0	2.5	256	57.0	3157	17.8	20.9	32.4	80.0
W18	S65	Wood	95.0	3.00	160	82.0	8565	23.0	25.3	42.1	291
W19	S67	Central heating	49.0	1.00	147	107	2066	16.0	14.1	41.0	50.7
W20	S69	Wood	73.0	2.00	200	67.0	6012	26.0	21.6	42.0	310
W21	S72	Wood	107	2.20	138	38.0	346.0	27.0	22.9	26.3	227
W22	S75	Gas	117	12.0	662	86.0	7922	23.0	24.6	29.8	153
W23	S77	Kerosene	83.0	2.40	157	68.0	5258	17.3	21.8	37.2	127
W24	S79	Gas	74.0	3.20	319	82.0	2998	82.0	15.7	24.6	101
W25	S82	Central heating	58.0	2.10	188	40.1	6489	27.0	17.6	31.9	214

Sample number	Corresponding summer sampling site	Type of heating system	Pb	Cd	Zn	Cu	Fe	Cr	Co	Ni	Mn
W26	S84	Wood	87.0	9.00	743	274	14459	32.0	19.6	38.4	125
W27	S85	Wood	119	3.00	252	64.0	13248	28.0	21.3	50.6	295
W28	S86	Wood	87.0	12.0	424	441	676.0	10.0	22.6	27.0	119
W29	S87	Wood	81.0	14.0	284	64.0	10704	46.0	17.5	40.9	169
W30	S88	Central heating	50.0	0.02	236	814	6454	42.0	10.8	66.3	160
Average			92.8	5.10	305	144	5385	27.1	18.7	42.2	139
SD			65.5	4.75	160	163	3812	15.1	3.7	15.1	69.2
Median			80.0	3.00	254	78.5	5302	24.5	18.6	39.85	118.2
C.V. (%)			71.0	94.0	53.0	113	71.0	56.0	20.0	36.0	50.0
Min.			48.0	0.02	138	31.0	260	7.00	10.8	24.6	50.7
Max.			406	16.0	743	814	14459	82.0	28.8	92.1	310

Table S3. Enrichment factor (EFs) of Pb, Cd, Zn, Cu, Fe, and Cr in the analyzed house dust samples collected from the all sampling sites during the summer season

Sample number	Fe	Pb	Cd	Zn	Cu	Cr
S1	1.0	22	342	48	33	8.4
S2	1.0	19	232	36	26	6.0
S3	1.0	17	154	14	5.0	4.0
S4	1.0	41	826	39	29	6.2
S5	1.0	20	614	41	63	7.4
S6	1.0	7.0	437	22	14	5.0
S7	1.0	24	383	24	15	6.2
S8	1.0	29	594	22	14	5.0
S9	1.0	22	952	34	26	7.1
S10	1.0	23	222	10	6.0	4.4
S11	1.0	20	560	45	8.0	4.3
S12	1.0	31	679	24	20	6.0
S13	1.0	16	516	23	12	4.0
S14	1.0	19	493	19	13	4.0
S15	1.0	5.0	62.6	2.0	2.0	4.0
S16	1.0	19	456	37	27	7.0
S17	1.0	14	271	24	13	7.1
S18	1.0	15	345	24	18	5.0
S19	1.0	16	586	25	22	6.4
S20	1.0	15	861	26	17	5.2
S21	1.0	25	1493	53	54	6.0
S22	1.0	19	1050	43	37	7.3
S23	1.0	25	1091	32	15	4.3
S24	1.0	29	440	43	25	5.4
S25	1.0	30	466	56	31	7.0
S26	1.0	12	558	30	25	5.1
S27	1.0	14	661	14	5.0	4.0
S28	1.0	14	680	22	10	4.4
S29	1.0	13	702	12	6.0	4.2

Sample number	Fe	Pb	Cd	Zn	Cu	Cr
S30	1.0	13	383	22	11	5.0
S31	1.0	12	558	30	25	5.1
S32	1.0	15	1023	42	28	7.2
S33	1.0	44	3588	49	34	11
S34	1.0	24	1642	52	52	7.0
S35	1.0	22	1769	42	24	8.0
S36	1.0	12	793	30	12	6.0
S37	1.0	9.0	599	22	10	3.0
S38	1.0	18	389	32	19	5.0
S39	1.0	19	836	38	23	6.3
S40	1.0	38	1360	49	34	6.5
S41	1.0	11	161	18	10	4.0
S42	1.0	11	791	33	33	6.0
S43	1.0	10	652	17	7.0	5.0
S44	1.0	10	800	42	18	7.0
S45	1.0	25	1250	31	25	5.0
S46	1.0	16	592	26	16	4.0
S47	1.0	26	571	21	13	4.2
S48	1.0	16	1027	28	13	5.0
S49	1.0	9.0	458	15	7.0	4.0
S50	1.0	17	865	21	12	5.0
S51	1.0	6.0	115	3.0	2.0	3.4
S52	1.0	16	456	26	16	5.0
S53	1.0	8.0	102	4.0	2.0	4.0
S54	1.0	10	131	4.0	3.0	5.0
S55	1.0	13	456	12	22	4.0
S56	1.0	22	884	34	26	6.0
S57	1.0	12	489	29	9.0	4.0
S58	1.0	14	795	17	6.0	5.3
S59	1.0	14	511	26	30	6.2
S60	1.0	21	1287	48	18	7.3
S61	1.0	32	841	24	13	5.3
S62	1.0	19	835	36	34	5.2
S63	1.0	24	1118	51	29	5.0
S64	1.0	13	335	50	37	6.0
S65	1.0	38	1381	58	27	7.0
S66	1.0	12	477	30	11	6.0
S67	1.0	10	378	33	26	4.4
S68	1.0	13	1020	50	31	8.3
S69	1.0	15	249	31	15	2.0
S70	1.0	25	792	36	18	5.4
S71	1.0	10	206	18	16	4.0
S72	1.0	23	1264	42	22	6.2
S73	1.0	18	388	22	10	5.0
S74	1.0	8.0	203	15	0.7	4.0

Sample number	Fe	Pb	Cd	Zn	Cu	Cr
S75	1.0	20	457	29	12	5.3
S76	1.0	25	921	34	30	4.3
S77	1.0	20	903	41	19	6.2
S78	1.0	27	939	45	21	7.0
S79	1.0	15	652	19	10	5.0
S80	1.0	16	944	34	22	5.0
S81	1.0	17	697	22	11	5.2
S82	1.0	10	606	16	6.0	4.5
S83	1.0	26	1254	68	22	4.9
S84	1.0	17	737	21	8.0	5.3
S85	1.0	14	588	18	11	6.3
S86	1.0	12	498	22	12	6.0
S87	1.0	10	518	12	7.0	4.0
S88	1.0	17	346	38	20	6.1
Average	1.0	18	700	30	19	5.3
SD	0.0	7.9	476	14	12	1.4
Range	(1.0–1.0)	(5.0–44)	(63–3588)	(2.0–68)	(0.7–63)	(2.0–11)