

Table S1. One-way ANOVA of Water Quality Parameters of Langat River Sampling Points

Parameter	N	Sum of Squares			Mean Square		F
		Between Groups	Within Groups	Total	Between Groups	Within Groups	
Al (µg/L)	24	743029.1	80659.7	823688.8	106147.0	5041.2	21.1** ($p = 6.1 \times 10^{-7}$)
As (µg/L)	24	7.6	5.5	13.0	1.1	0.3	3.2* ($p = 0.027$)
Cd (µg/L)	24	11.8	6.1	17.9	1.7	0.4	4.4** ($p = 0.007$)
Cr (µg/L)	24	0.5	1.2	1.7	0.1	0.1	1 ($p = 0.491$)
Pb (µg/L)	24	618.1	48.7	666.8	88.3	3.0	29** ($p = 6.1 \times 10^{-8}$)

Note: **Significant at 0.01 level. *Significant at 0.05 level.

Table S2. Correlations among Water Quality Parameters in Langat River (2015)

Parameters		Al	As	Cd	Cr	Pb	DO	SPC	Salinity	pH	Temp.
Al	Pearson Correlation	1									
	Sig. (1-tailed)										
As	Pearson Correlation	.554*	1								
	Sig. (1-tailed)	.077									
Cd	Pearson Correlation	.888***	.584*	1							
	Sig. (1-tailed)	.002	.064								
Cr	Pearson Correlation	.725**	.601*	.798***	1						
	Sig. (1-tailed)	.021	.057	.009							
Pb	Pearson Correlation	.875***	.741**	.771**	.863***	1					
	Sig. (1-tailed)	.002	.018	.013	.003						
DO	Pearson Correlation	.660**	.709**	.821***	.728**	.612**	1				
	Sig. (1-tailed)	.037	.024	.006	.020	.053					
SPC	Pearson Correlation	-.798***	-.402	-.883***	-.632**	-.607*	-.811***	1			
	Sig. (1-tailed)	.009	.162	.002	.046	.055	.007				
Salinity	Pearson Correlation	-.824***	-.412	-.880***	-.661**	-.649**	-.800***	.995***	1		
	Sig. (1-tailed)	.006	.155	.002	.037	.041	.009	.000			
pH	Pearson Correlation	-.347	.275	-.153	-.230	-.250	.126	.092	.089	1	
	Sig. (1-tailed)	.200	.255	.359	.292	.275	.383	.414	.417		
Temp.	Pearson Correlation	-.767**	-.585*	-.837***	-.868***	-.781**	-.852***	.824***	.819***	.315	1
	Sig. (1-tailed)	.013	.064	.005	.003	.011	.004	.006	.006	.224	

Note: ***. Correlation is significant at the 0.01 level (1-tailed); **. Correlation is significant at the 0.05 level (1-tailed); *. Correlation is significant at the 0.10 level (1-tailed).

Table S3. ANOVA of Absolute Mean difference of Metal's Concentrations in River and Treated Water

Parameter	N	Sum of Squares			Mean Square		F
		Between Groups	Within Groups	Total	Between Groups	Within Groups	
Al (µg/L)	24	235.558	1638.329	1873.887	235.558	35.616	6.614* ($p = 0.013$)
As (µg/L)	24	2.083	2030.541	2032.624	2.083	44.142	0.047 ($p = 0.829$)
Cd (µg/L)	24	0.792	1050.178	1050.970	0.792	22.830	0.0347 ($p = 0.853$)
Cr (µg/L)	24	1.333	1882.519	1883.852	1.333	40.924	0.0326 ($p = 0.858$)
Pb (µg/L)	24	13.547	1452.740	1466.286	13.547	31.581	0.429 ($p = 0.516$)

Note: ***Significant at 0.01 level. **Significant at 0.05 level. *Significant at 0.10 level.

Table S4. ANOVA of Absolute Mean difference of Metals in Treated Water based on the Concentration Removal by WTPs

Parameter	N	Sum of Squares			Mean Square		F
		Between Groups	Within Groups	Total	Between Groups	Within Groups	
Al (µg/L)	24	636724.3	200.7	636925	90960.6	12.5	7251.1*** ($p = 8.6 \times 10^{-7}$)
As (µg/L)	24	477.0	591.3	1068.3	68.1	37.0	1.84 ($p = 0.147$)
Cd (µg/L)	24	597.6	419.3	1016.9	85.4	26.2	3.26** ($p = 0.024$)
Cr (µg/L)	24	574.2	542.7	1116.9	82.0	33.9	2.42* ($p = 0.068$)
Pb (µg/L)	24	189.1	123.3	312.4	27.0	7.7	3.50*** ($p = 0.018$)

Note: ***Significant at 0.01 level. **Significant at 0.05 level. *Significant at 0.10 level. WTP= Water Treatment Plant.

Table S5. Absolute difference in metals' concentration between household tap and filtered water

Parameter	N	Sum of Squares			Mean Square		F	p value
		Between Groups	Within Groups	Total	Between Groups	Within Groups		
Al ($\mu\text{g/L}$)	45	41.858	12448.124	12489.982	41.858	141.456	0.296	0.000
As ($\mu\text{g/L}$)	45	427.619	13246.757	13674.377	427.619	150.531	2.841	0.095
Cd ($\mu\text{g/L}$)	45	285.552	15012.965	15298.517	285.552	170.602	1.674	0.199
Cr ($\mu\text{g/L}$)	45	40.000	14193.170	14233.170	40.000	161.286	0.248	0.620
Pb ($\mu\text{g/L}$)	45	926.727	12718.866	13645.593	926.727	144.533	6.412*	0.013

Note: *Significant at 0.05 level.

Table S6. One-way ANOVA of Metal Concentrations in Drinking Water Supply Chain

Metal	N	Sum of Squares			Mean Square		F
		Between Groups	Within Groups	Total	Between Groups	Within Groups	
Al	138	286045.2	1118635.4	1404680.6	95348.4	8348.0	11.4* ($p = 1 \times 10^{-6}$)
As	138	14.5	39.0	53.5	4.8	0.3	16.6* ($p = 3.02 \times 10^{-9}$)
Cd	138	14.7	23.6	38.4	4.9	0.2	27.9* ($p = 4.62 \times 10^{-14}$)
Cr	138	1.5	5.1	6.6	0.5	0.0	13.1* ($p = 1.56 \times 10^{-7}$)
Pb	138	602.4	1332.0	1934.5	200.8	9.9	20.2* ($p = 7.32 \times 10^{-11}$)

Note: *Significant at 0.05 level. .