

Table S1. Codes of the Merck test kits.

Parameter	Code
COD	14560
N-NO ₃ ⁻	09713
P-PO ₄ ³⁻	14842
N-NH ₄ ⁺	14752
N _{tot}	14537
Phenol index	00856
Nonionic surfactants	01787
Anionic surfactants	02552

Table S2. Values of quality parameters and reduction degree for SBR system.

Time [d]	2	4	6	8	10	12	14	16	18	20	22
COD [mg/L]											
Grey water	415	423	420	550	585	542	611	638	608	595	587
Effluent	45	38	37	50	51	43	50	47	48	37	35
Removal, %	89.16	91.02	91.19	90.91	91.28	92.07	91.82	92.63	92.11	93.78	94.04
BOD ₅ [mg/L]											
Grey water	190	196	190	200	220	240	240	220	210	210	220
Effluent	8	8	2	4	4	4	8	8	2	2	2
Removal, %	95.79	95.92	98.95	98.00	98.18	98.33	96.67	96.36	99.05	99.05	99.09
TOC [mg/L]											
Gray water	51.2	58.23	58.92	56.3	52.6	52.6	58.6	59.2	59.3	56.2	56.14
Effluent	4.12	4.58	3.794	5.169	3.794	5.48	5.69	4.15	5.78	3.89	4.11
Removal, %	91.95	92.13	93.56	90.82	92.79	89.58	90.29	92.99	90.25	93.08	92.68
Absorbance [1/cm]											
Grey water	0.468	0.54	0.48	0.58	0.611	0.61	0.58	0.59	0.54	0.49	0.51
Effluent	0.14	0.145	0.101	0.111	0.125	0.12	0.125	0.15	0.14	0.125	0.13
Removal, %	70.09	73.15	78.96	80.86	79.54	80.33	78.45	74.58	74.07	74.49	74.51
Turbidity [FTU]											
Grey water	26	26	26	28	28	31	31	31	26	28	30
Effluent	4	5	5	4	4	4	5	4	5	4	5
Removal, %	84.62	80.77	80.77	85.71	85.71	87.10	83.87	87.10	80.77	85.71	83.33
Color [mgPt/L]											
Grey water	182	185	185	192	222	228	228	224	195	195	182
Effluent	48	51	43	45	45	43	37	45	46	42	45
Removal, %	73.63	72.43	76.76	76.56	79.73	81.14	83.77	79.91	76.41	78.46	75.27
P-PO ₄ ³⁻ [mg/L]											
Grey water	4.4	4.3	3.8	4.2	4.6	3.8	4.5	4.2	3.8	3.9	4.2
Effluent	9.2	8.1	7.5	2.3	1.2	1.5	1.4	1.2	2.5	1.1	2.6
Removal, %	0	0	0	45.24	73.91	60.53	68.89	71.43	34.21	71.79	38.10
N-NO ₃ ⁻ [mg/L]											
Grey water	0.5	0.6	0.8	0.5	0.4	0.6	0.8	0.8	0.4	0.6	0.6
Effluent	6.5	10.2	6.9	7.3	7.2	7.5	8.2	6.5	7.8	8.2	7.6
N _{tot} [mg/L]											
Grey water	10.2	12.2	10.5	10.2	12.9	10.4	10.2	9.5	11.3	10.8	9.4
Effluent	8.2	10.5	8	8.8	8.2	8.5	8.5	8.2	8.5	8.2	8.1
Removal, %	19.61	13.93	23.81	13.73	36.43	18.27	16.67	13.68	24.78	24.07	13.83
Anionic surfactants [mg/L]											
Grey water	15.5	16.2	17.5	14.1	12.9	13.9	15.1	16.5	14.5	15.8	15.1
Effluent	0.27	0.34	0.54	0.14	0.06	0.11	0.25	0.34	0.25	0.28	0.3
Removal, %	98.26	97.90	96.91	99.01	99.53	99.21	98.34	97.94	98.28	98.23	98.01

Table S3. Values of quality parameters measured in SBR effluent and permeate samples.

Parameter	After	Membrane UF								
	SBR	BN1	BN2	BN3	V1	V2	V3	GM1	GM2	GM3
pH [–]	7.88	8.34	8.3	8.09	7.98	8.11	8.06	7.71	7.7	7.68
Conductivity [μS/cm]	735	433.8	360.4	312.8	381.2	344.1	296.5	284.3	317.8	353.7
Color [mgPt/L]	37	16	12	22	20	13	11	29	25	10
Absorbance [1/cm]	0.18	0.04	0.032	0.048	0.036	0.026	0.025	0.035	0.03	0.015
COD [mg/L]	37	8.2	6.6	6.5	9.7	8.3	5.8	18.1	12.9	10.4
BOD ₅ [mg/L]	4	0	0	0	0	0	0	0	0	0
N-NO ₃ [–] [mg/L]	6.5	0.28	0.24	0.18	0.56	0.37	0.21	0.43	0.36	0.21
P-PO ₄ ^{3–} [mg/L]	4.3	2.1	1.5	1.2	1.8	1.3	1	0.9	1.1	1.2
N-NH ₄ ⁺ [mg/L]	0.2	0.06	0.07	0.03	0.09	0.1	0.11	0.1	0.1	0.03
N _{tot} [mg/L]	8.1	4.1	3.7	3.3	5	4.7	3.8	4.5	4.3	4.3
Phenol index [mg/L]	1.16	0.08	0.09	0.11	0.11	0.11	0.13	0.06	0.05	0.07
Nonionic surfactants [mg/L]	0	0	0	0	0	0	0	0	0	0
Anionic surfactants [mg/L]	0.29	0	0	0	0	0	0	0	0	0
TOC [mg/L]	5.03	2.09	1.5	1.24	2.19	1.04	0.95	0.77	0.71	0.47