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Table S1. Overall and seasonal concentration of CO, CO₂, Particulate matter, H₂S, NH₃ and TVOCs in the sport park and municipal wastewater treatment plant X for one day investigation.

Sampling Area	CO (ppm)	CO ₂ (ppm)	PM ₁ (µg/m ³)	PM _{2.5} (µg/m ³)	PM ₇ (µg/m ³)	PM ₁₀ (µg/m ³)	TSP (µg/m ³)	H ₂ S (ppm)	NH ₃ (ppm)	TVOC (ppbv)
Winter										
Sports Park	ND	322	ND	2.09	8.55	10.18	12	ND	ND	369.09
Primary Clarifier	0.1	429	ND	2	9	12	17	ND	ND	26
Bioreactor	0.32	523.17	0.33	9.33	23.67	31.83	41.67	1.37	0.33	538.86
Secondary Settling Tank	2.44	2892.86	ND	9.71	43	57.14	78.28	ND	ND	1360.43
Spring										
Sports Park	0.24	285.55	ND	2	10.09	12.91	17.27	ND	ND	330.82
Primary Clarifier	0.78	1668	0.17	4	15.17	18	22.83	3.03	0.17	3498.5
Bioreactor	1.93	4478.57	1	5.57	24.71	29.14	33.57	0.67	ND	1138.29
Secondary Settling Tank	1.62	4359.33	1.67	7.5	29.67	35.5	47.17	ND	ND	1174.17
Summer										
Sports Park	1.45	301.55	2.09	6.64	17.82	23.18	16.09	ND	ND	317.09
Primary Clarifier	1.38	573.5	1.67	21.5	91.5	111	174.83	1.63	ND	564.67
Bioreactor	1.79	1943.57	1.14	6	38.14	35.88	38.43	0.32	ND	340.57
Secondary Settling Tank	1.47	1969.67	2	9.5	220.17	271.33	366.17	0.2	0.17	463.83
Autumn										
Sports Park	0.63	309.27	1.27	6.09	22.55	27.09	30.64	ND	ND	433.91
Primary Clarifier	0.68	478.5	2	10.5	89.17	112.33	144.5	0.22	ND	371.33
Bioreactor	1.07	1850.71	1.71	13.57	64.86	85.57	118.29	0.3	0.14	554
Secondary Settling Tank	1.13	2349	2.17	10.83	59.33	77	113.5	ND	ND	448.17

Overall

Sports Park	0.58	304.59	0.84	4.20	14.75	18.340	21.5	ND	ND	362.72
Primary Clarifier	0.79	810.79	1.04	11.33	54.88	68.29	95.96	1.56	0.13	1373
Bioreactor	1.81	2791.43	0.96	8.71	42.68	52.57	68.71	0.29	0.07	848.32
Secondary Settling Tank	1.40	2696.5	1.75	10.33	93.08	115.17	159.25	0.05	0.04	659.67

Table S2. Characteristic and concentration of VOC (ppbv) in the sport park and municipal wastewater treatment plant X for one day investigation.

VOC	Sport Park			Primary Clarifier			Bioreactor			Secondary Settling Tank		
	n	Mean	SD	n	Mean	SD	n	Mean	SD	n	Mean	SD
Toluene	1	3.02	0	2	0.92	0.7	3	74.29	122.39	4	20.56	14.63
Ethanol	3	33.11	32.35	3	33.60	46.51	2	20.56	0.81	2	49.46	59.15
Acetone	2	11.73	2.16	4	13.99	12.21	2	11.74	2.95	2	8.28	0.98
n-Decane	0	ND	-	0	ND	-	2	24.05	28.28	0	ND	-
n-Butane	1	2.68	0	1	3.58	0	1	5.66	0	1	4.16	0
p-Xylene	0	ND	-	1	1.6	0	0	ND	-	0	ND	-
n-Pentane	0	ND	-	0	ND	-	0	ND	-	1	0.53	0
Freon-12	3	1.16	0.06	2	1.1	0.01	2	1.05	0.13	1	1	0
Isopentane	1	2.32	0	2	3.70	1.22	2	4.52	2.38	3	2.74	0.69
Freon-11	2	1.04	0.28	2	1.02	0.26	2	0.99	0.09	2	0.89	0.29
Isoprene	1	1.1	0	0	ND	-	1	1.16	0	1	1.26	0
Isopropyl Alcohol	2	3.74	2.98	0	ND	-	0	ND	-	0	ND	-
Methylene Chloride	2	1.85	0.45	1	2.11	0	2	2.2	0.06	3	2.59	0.35
Chloroform	0	ND	-	0	ND	-	2	1.45	0.21	0	ND	-