

Water quality, water supply line for June 2019

parameter	Unit	Subanvi	Phra Khanong	Samut Prakan	Maen si	Thung Mahamek	Phaya Thai	Lat Phrao	Suvarnabhumi	Prahachuen	Bang Khen	Mia buri	Bangkok Noi	Phasi Charoen	Taksin	Suksawat	Nonthaburi	Bang Hae Thong	Mahaasawat	Criteria MWA	Recommended WHO 2011
Free residual chlorine	Mg / l	0.75	0.79	0.00	0.69	0.57	0.30	0.00	0.14	0.00	0.00	0.75	0.52	0.00	0.76	0.48	0.75	0.78	0.00	0.2-2.0	-
True color / color appears	Pt-Co / Pt-Co	0<5	0<5	<5	0<5	0<5	<5	<5	0<5	<5	<5	0<5	0<5	<5	0<5	0<5	0<5	0<5	<5	<15	< / up to 15
Turbidity	NTU	<0.20	<0.20	0	<0.20	<0.20	<0.20	0	<0.20	0	0	<0.20	<0.20	0	0.2	<0.20	<0.20	<0.20	0	1	Not more than 4.0
Acidity	-	7.58	7.58	0	7.23	7.38	7.23	0	7.15	0	0	7.18	7.66	0	7.69	7.42	7.14	7.21	0	6.5-8.5	-
Electrical conductivity	MicroMm / cm	324	324	0	322	323	319	0	325	0	0	324	321	0	216	219	310	201	0	-	-
Dissolved Solids	Mg / l	194	194	0	193	194	191	0	195	0	0	194	193	0	130	131	186	121	0	1,000	Not more than 1,000
Iron	Mg / l	<0.05	<0.05	0	<0.05	<0.05	0.06	0	<0.05	0	0	<0.05	<0.05	0	<0.05	<0.05	<0.05	<0.05	0	0.3	Not more than 0.3
smell	-	Chlorine	Chlorine	0	Chlorine	Chlorine	Chlorine	0	Chlorine	0	0	Chlorine	Chlorine	0	Chlorine	Chlorine	Chlorine	Chlorine	0	Not objectionable	Not objectionable
Total alkalinity (calcium carbonate)	Mg / l	72	72	0	69	70	66	0	72	0	0	74	70	0	78	80	68	76	0	-	-
Alkalinity - phenolphthalein	Mg / l	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
Total Solids	Mg / l	195	195	0	193	194	192	0	195	0	0	195	193	0	130	132	186	121	0	-	-
Total hardness	Mg / l	102	105	0	106	104	109	0	108	0	0	107	106	0	95	98	96	98	0	-	-
Carbonate hardness	Mg / l	72	72	0	69	70	66	0	72	0	0	74	70	0	78	80	68	76	0	-	-
Non-Carbonate hardness	Mg / l	30	33	0	37	34	43	0	36	0	0	33	36	0	17	18	28	22	0	-	-
Chloride	Mg / l	26	25	0	24	25	24	0	27	0	0	28	22	0	7	8	22	4	0	250	Not more than 250
Sulfate	Mg / l	43	39	0	48	46	47	0	40	0	0	38	41	0	20	20	51	17	0	250	Not more than 250
Calcium	Mg / l	32	31.8	0	30	31.2	31.8	0	31.2	0	0	31.2	33.8	0	27.6	29	30.5	29.2	0	-	-
Fluoride	Mg / l	0.21	0.27	0	0.27	0.27	0.25	0	0.27	0	0	0.28	0.26	0	0.17	0.18	0.27	0.16	0	0.70	Not more than 0.7
Manganese	Mg / l	<0.0011	<0.0011	0	<0.0011	<0.0011	0.0013	0	<0.0011	0	0	<0.0011	<0.0011	0	<0.0011	<0.0011	0.0041	<0.0011	0	0.1	Not more than 0.1
Magnesium	Mg / l	5.28	6.12	0	7.44	6.24	7.08	0	7.2	0	0	6.96	5.16	0	6.24	6.12	4.74	6	0	-	-
Silicon	Mg / l	0.7956	0.819	0	0.5103	1.0096	0.3495	0	0.6574	0	0	0.6956	0.3138	0	3.6384	3.537	1.0662	3.7313	0	-	-
Aluminum	Mg / l	0.081	0.0861	0	0.0764	0.0885	0.0524	0	0.0889	0	0	0.0991	0.0592	0	0.1064	0.0875	0.0805	0.0881	0	0.2	Not more than 0.9
Temperature	Mg / l	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
Antimony	ND	ND	ND	0	ND	ND	ND	0	ND	0	0	ND	ND	0	ND	ND	ND	ND	0	0.02	Not more than 0.02
Nickel	Mg / l	<0.0013	0.0014	0	<0.0013	<0.0013	<0.0013	0	<0.0013	0	0	<0.0013	0.0014	0	ND	ND	<0.0013	ND	0	0.07	Not more than 0.07
Barium	Mg / l	0.7956	0.0476	0	0.0442	0.0482	0.0451	0	0.6574	0	0	0.0458	0.0432	0	0.0302	0.0309	0.0464	0.0265	0	1.3	Not more than 0.7
Selenium	ND	<0.0053	ND	0	ND	ND	<0.0053	0	<0.0053	0	0	<0.0053	<0.0053	0	<0.0053	ND	ND	<0.0053	0	0.04	Not more than 0.04
Silver	Mg / l	ND	ND	0	ND	ND	ND	0	ND	0	0	ND	ND	0	ND	0.0015	ND	ND	0	0.1	Not more than 0.1
Arsenic	Mg / l	ND	ND	0	ND	ND	ND	0	ND	0	0	ND	ND	0	ND	ND	ND	ND	0	0.01	Not more than 0.01
Beryllium	Mg / l	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
Cobalt	Mg / l	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
Molybdenum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
E.coli	Found - not found / 100 ml	Not found	Not found	0	Not found	Not found	Not found	0	Not found	0	0	Not found	Not found	0	Not found	Not found	Not found	Not found	0	Not found	not found
Oxygen Consumed	Mg / l	0.92	1.08	0	1.39	0.92	0.92	0	1	0	0	0.92	1.08	0	0.54	0.77	0.92	0.54	0	-	-
Ammonia as Nitrogen	ND	ND	ND	0	ND	ND	ND	0	ND	0	0	ND	ND	0	ND	ND	ND	ND	0	1.5	Not more than 1.5
Nitrate as Nitrate	Mg / l	1.68	1.38	0	0.86	1.22	0.83	0	0.78	0	0	1.75	0.85	0	ND	1.06	0.84	ND	0	50	No more than 50
Nitrite as Nitrite	ND	ND	ND	0	ND	ND	0.008	0	0.022	0	0	0.008	0.008	0	ND	ND	ND	0.007	0	3	No more than 3
All microorganisms	Colony Forming Unit / ml	2	0	0	0	0	1	0	0	0	0	0	1	0	0	1	7	0	0	500	-
Sodium	Mg / l	22.44	22.53	0	22.19	22.41	22.27	0	23.03	0	0	23.39	21.57	0	5.15	5.68	21.15	2.87	0	200	-
Potassium	Mg / l	4.05	4.06	0	3.84	4.08	3.76	0	3.92	0	0	3.89	4.03	0	2.01	2.12	3.7	1.82	0	-	-
Trihalomethane	sum of ratio	0.17	0.2	0	0.29	0.14	0.14	0	0.17	0	0	0.13	0.14	0	0.07	0.09	0.06	0.08	0	1	No more than 1
Total bacteria	Mg / l	3.5	3.3	0	2.4	2.3	2.2	0	2.3	0	0	2.3	2.2	0	1.4	1.6	2.1	1.3	0	-	-
Lead	Mg / l	ND	0.00066	0	0.00008	0.0003	0.00006	0	0.00024	0	0	ND	0.00009	0	ND	0.00009	0.00005	ND	0	0.01	Not more than 0.01
chromium	Mg / l	0.00016	0.00012	0	0.00005	0.00005	0.00046	0	0.00006	0	0	0.00002	0.00009	0	0.00003	0.00003	0.00025	0.00006	0	0.05	Not more than 0.05
Cadmium	ND	ND	ND	0	ND	ND	ND	0	ND	0	0	0.000005	ND	0	ND	ND	ND	ND	0	0.003	Not more than 0.003
Copper	Mg / l	<0.05	<0.05	0	<0.05	<0.05	<0.05	0	<0.05	0	0	<0.05	<0.05	0	<0.05	<0.05	<0.05	<0.05	0	1	Not more than 2
Zinc	Mg / l	<0.01	ND	0	ND	ND	<0.01	0	ND	0	0	ND	ND	0	ND	ND	ND	ND	0	3	No more than 3
Mercury	Mg / l	ND	ND	0	ND	ND	ND	0	ND	0	0	ND	0.00001	0	<0.00003	0.00001	ND	0.00005	0	0.06	Not more than 0.06
Benzene *	Mg / l	ND	ND	0	ND	ND	ND	0	ND	0	0	ND	ND	0	ND	ND	ND	ND	0	0.01	Not more than 0.01
Toluene *	Mg / l	ND	ND	0	ND	ND	ND	0	ND	0	0	ND	ND	0	ND	ND	ND	ND	0	0.7	Not more than 0.7
Chlorobenzene *	Mg / l	ND	ND	0	ND	ND	ND	0	ND	0	0	ND	ND	0	ND	ND	ND	ND	0	-	-
Meta-Xylene *	Mg / l	ND	ND	0	ND	ND	ND	0	ND	0	0	ND	ND	0	ND	ND	ND	ND	0	-	-
Styrene *	Mg / l	ND	ND	0	ND	ND	ND	0	ND	0	0	ND	ND	0	ND	ND	ND	ND	0	0.02	Not more than 0.02
Isopropyl benzene *	Mg / l	ND	ND	0	ND	ND	ND	0	ND	0	0	ND	ND	0	ND	ND	ND	ND	0	-	-
Normal propyl benzene *	Mg / l	ND	ND	0	ND	ND	ND	0	ND	0	0	ND	ND	0	ND	ND	ND	ND	0	-	-
1,3,5-triethyl benzene *	Mg / l	ND	ND	0	ND	ND	ND	0	ND	0	0	ND	ND	0	ND	ND	ND	ND	0	-	-
Tertiary butyl benzene *	Mg / l	ND	ND	0	ND	ND	ND	0	ND	0	0	ND	ND	0	ND	ND	ND	ND	0	-	-

- Sample collection 5-7 June 2019

- Criteria for determination of MWA = water quality Criteria MWA

- Unit: mg / l (mg / cubic dm) = mg / l, ml = ml

- NIS Nitro-nitrate content (0.01 mg / l, iron content <0.02 mg / l, manganese content <0.001 mg / l, aluminum content <0.0012 mg / l, Antimony quantity

<0.0012 mg / l, total content <0.001 mg / l, boron content <0.001 mg / l, selenium content <0.001 mg / l, amount of mercury <0.001 mg / l,

Arsenic content <0.0015 mg / l, organic carbon content 0.02 mg / l, lead content <0.00005 mg / l, chromium content <0.00001 mg / l, cadmium content <0.000003

Mg / l, copper content <0.005 mg / l, zinc content <0.003 mg / l, mercury content <0.00001 mg / l and benzene content <0.002 mg / l, Toluene content <0.002

Mg / l, chlorophyll content <0.002 mg / l, meta-xylene content <0.001 mg / l, styrene content <0.001 mg / l, isopropyl benzene content <0.001 mg / l,

Normal propyl benzene content <0.001 mg / l, volume 1,3,5-triethyl benzene <0.001 mg / l, tertiary butyl benzene <0.001 mg / l